



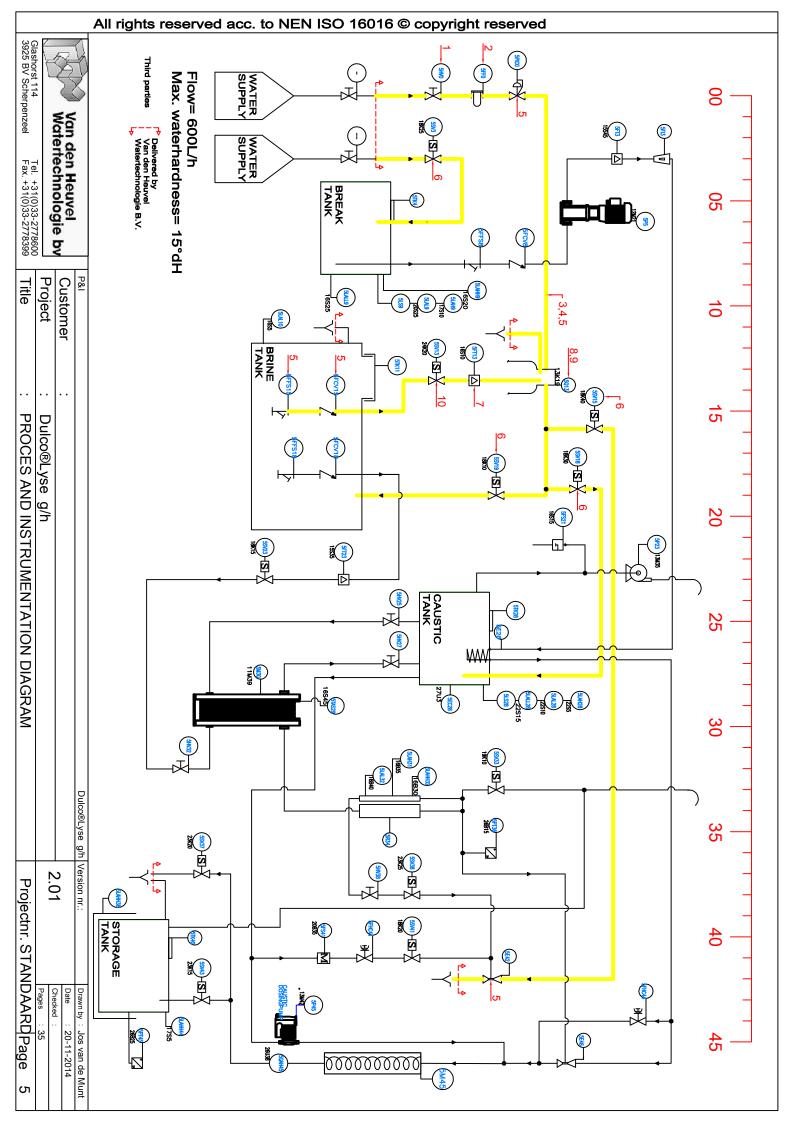


Drinking water application DULCO[®]**Lyse**

The DULCO[®] Lyse finds application in the treatment and disinfection of drinking water. The German DVGW and British DWI regulations require that installations that come into contact with drinking water must use certified components or must be fully certified. This manual contains WRAS or similar certificates for all non-metal components in the DULCO[®] Lyse that come into contact with drinking water. A flow diagram of the DULCO[®] Lyse is attached to this document.

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Scherpenzeel, 2015 Van den Heuvel Watertechnologie bv



WRAS Certificate Dulco®Lyse				
Certificate	Certificate number	Status	Component	Supplier
<u>BV546</u>	1	х	Ball valve	GF
Polycgim Industrie	2	x	Strainer	Pro Water
WRAS PVCU	3	х	Piping PVCU/C	GF
WRAS Tangit	4	х	Glue	Tangit
WRAS Fittings PVCU	5	х	Fittings	GF
238 WRAS CERTIFICATE No 1403061	6	х	Solenoid valve	ASCO
WRAS .	7	х	Flowmeter	Huba
WRAS certificate threaded industrial tanks	8	х	Softener vessel	Pentair
FDA Europe	9	х	Resin	Lanxess
WRAS PVC-U fittings-valves MAT LAB 392D	10	х	Solenoid valve	FIP
Date	30-1-2015	;		



GEORGE FISCHER SALES LTD

has had the undermentioned product examined, tested and found, when correctly installed, to comply with the requirements of the United Kingdom Water Supply (Water Fittings) Regulations/Scottish Water Byelaws.

TYPE 546 PVC-U BALL VALVE (DN10 - DN100)

Reference should be made to the accompanying acceptance letter for installation requirements

The product so mentioned will be listed in the Water Fittings and Materials Directory for a period until:

7 FEBRUARY 2012

0702085

Certificate No.

Chairman, Test and Assessment Group





CERTIFICATE

Product: Polychim Industrie - Polypropylene homopolymers A10TB, H10TB

Date: April 2011

Polychim Industrie hereby certifies that its above listed, produced and commercialized homopolymer polypropylene products have been tested to be in conformity with the European Directive 2002/72/EC and the European Regulation 10/2011 relating to plastics materials and articles intended to come into contact with foodstuffs.

Tests have been carried out at the University of Ghent according to :

European directive 2002/72/EEC.

The test carried out is the normal test for general packing applications (10 days at 40 °C).

Overall migration:

According to the directives 2002/72/EEC and his amendments 2004/1/EEC - 2004/19/EEC - 2005/79/EEC - 2007/19/EEC - 2008/39/EC, 82/711/EEC, 85/572/EEC, EC regulation N°935/2004 and N°975/2009, the overall migration limit, for which a maximum value of 10 mg/dm² or 60 mg/kg is set, has to be controlled on the finished articles intended to come into contact with foodstuffs at a temperature and for an exposure time that corresponds to the worst foreseeable conditions of contact. The conversion process can affect the OM, and accordingly, only the converter can guarantee to the food packager that the limit is not exceeded. Specific migration limit(s):

Specific restrictions are placed on certain additives in addition to those on overall migration introduced in 2002/72/EEC.

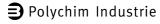
Compliance with end-use regulations of Polychim Industrie S.A.S. polypropylene in food contact applications may be subject to further specific approval by regulatory organizations and remains the sole responsibility of the part manufacturer. Polychim Industrie S.A.S. remains at your service to provide information concerning the use of Polychim Industrie polypropylene upon request.

Valid for 1 year from date.

Page 1 of 2

The technical information provided by Polychim Industrie S.A.S. herein is presented in good faith, to the best of our knowledge and based on information we believe is reliable. However no warranty of merchantability or fitness for a particular purpose is implied or expressed for present or future as Polychim Industrie S.A.S. reserves the right to change the composition of its products in order to enhance merchantability and/or performance. Nor will Polychim Industrie S.A.S. be liable for any direct, indirect, special, incidental, or consequential loss or damage, regardless of legal theory, negligence or strict liability.

This document contains confidential information of Polychim Industrie S.A.S that is not to be used, disclosed or reproduced in whole or in part except as authorized in writing by Polychim Industrie S.A.S.





CERTIFICATE

Product: Polychim Industrie - Polypropylene homopolymers A10TB, H10TB

Date : April 2011

There is one substance used in the production process for <u>PP homopolymers A10TB</u>, <u>H10TB</u> subject to a specific migration limit in accordance with European Regulation 10/2011.

4-Ethoxybenzoic acid, ethyl ester CAS n°023676-09-7 SML: 3.6 mg/kg

Quantity: 150 ppm max.

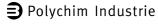
We hope this information is helpful to you and will be used for that typical purpose.

Valid for 1 year from date.

Page 2 of 2

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Our Ref:

HL/M1303064

Test Report: M105552/A

16th December 2013



George Fischer Sales UK Limited, Paradise Way, Coventry, CV2 2ST

WATER REGULATIONS ADVISORY SCHEME (WRAS) MATERIAL APPROVAL

The material referred to in this letter is suitable for contact with wholesome water for domestic purposes having met the requirements of BS 6920-1:2000 'Suitability of non-metallic products for use in contact with water intended for human consumption with regard to their effect on the quality of the water'.

The reference relates solely to its effect on the quality of the water with which it may come into contact and does not signify the approval of its mechanical or physical properties for any use.

POLYVINYLCHLORIDE (PVC, PVC-U AND CPVC) - COMPONENTS

5300

+GF+ PVC-U Pipe. Dark grey coloured, extruded PVC-U pipe. For use with water up to 60°C.

APPROVAL NUMBER: 1310538

APPROVAL HOLDER:

GEORGE FISCHER SALES UK LIMITED

The Scheme reserves the right to review approval. This approval is valid between October 2013 and October 2018.

An entry, as above, will accordingly be included in the Water Fittings Directory on-line under the section headed, "Materials which have passed full tests of effect on water quality".

The Directory may be found at: www.wras.co.uk/directory

Yours faithfully

Jason Furnival

Approvals & Enquiries Manager

Water Regulations Advisory Scheme

The material referred to in this letter is suitable for contact with water for domestic purposes. **Approval** of this material does not signify the approval of its mechanical or physical properties for any use.

Manufacturers or applicants may only quote in their sales literature terms which are used in this letter, namely that; 'the material as listed, having passed the tests of effect on water quality, is suitable for use in contact with wholesome water'

This may be abbreviated to 'Water Regulations Advisory Scheme - Approved Material' or 'WRAS Approved Material'.

The scope of an Approval does not extend to rebranded materials unless otherwise agreed by the Scheme.

Use of the WRAS Approved Material Logo

The WRAS Approved Material logo is registered under the Trade Marks Acts 1994

Approval holders may use the WRAS Approved Material logo and make reference to any approval issued by WRAS Ltd. in respect of a particular material or range of materials provided the approval is, and remains valid.

Approval holders are entitled to use the logo on the packing, promotional literature and point of sale advertising Approved Materials.

Modifications to existing Approvals

It is a condition of WRAS Material Approval that <u>NO</u> changes or modifications to the Approved Material, be made without the Approval Holder first notifying WRAS Ltd. Full details of the proposed changes must be provided to the Scheme. Failure to comply with this condition will immediately invalidate a previously granted Approval.

Re-Approval

WRAS will write to you 1 year before the approval expires asking whether you would like to renew it. Please complete the relevant section of the MA3 application form which will be included with the letter and return to WRAS (via e-mail or post).

Our Ref:

HL/M1302119

Test Report: M105552/E

19th September 2013



George Fischer Sales Limited, Paradise Way, Coventry, CV2 2ST

WATER REGULATIONS ADVISORY SCHEME (WRAS) **MATERIAL APPROVAL**

The material referred to in this letter is suitable for contact with wholesome water for domestic purposes having met the requirements of BS 6920-1:2000 'Suitability of non-metallic products for use in contact with water intended for human consumption with regard to their effect on the quality of the water'.

The reference relates solely to its effect on the quality of the water with which it may come into contact and does not signify the approval of its mechanical or physical properties for any use.

POLYVINYLCHLORIDE (PVC, PVC-U AND CPVC)

5300

GF PVCU Fittings. Dark grey coloured, injection moulded PVCU fittings manufactured from PVC-10 Grey. For use with water up to 60°C.

APPROVAL NUMBER: 1309523

APPROVAL HOLDER:

GEORGE FISCHER SALES LIMITED

The Scheme reserves the right to review approval. This approval is valid between September 2013 and September 2018.

An entry, as above, will accordingly be included in the Water Fittings Directory on-line under the section headed, "Materials which have passed full tests of effect on water quality".

The Directory may be found at: www.wras.co.uk/directory

Yours faithfully

Jason Furnival

Approvals & Enquiries Manager

Water Regulations Advisory Scheme

The material referred to in this letter is suitable for contact with water for domestic purposes. Approval of this material does not signify the approval of its mechanical or physical properties for any use.

Manufacturers or applicants may only quote in their sales literature terms which are used in this letter, namely that; 'the material as listed, having passed the tests of effect on water quality, is suitable for use in contact with wholesome water'

This may be abbreviated to 'Water Regulations Advisory Scheme - Approved Material' or 'WRAS Approved Material'.

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Use of the WRAS Approved Material Logo

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Re-Approval

WRAS will write to you 1 year before the approval expires asking whether you would like to renew it. Please complete the relevant section of the MA3 application form which will be included with the letter and return to WRAS (via e-mail or post).

Our Ref:

HL/M120292

Test Report: M105317/B





George Fischer Sales Ltd. Paradise Way, Coventry, CV2 2ST

WATER REGULATIONS ADVISORY SCHEME (WRAS) MATERIAL APPROVAL

The material referred to in this letter is suitable for contact with wholesome water for domestic purposes having met the requirements of BS 6920-1:2000 'Suitability of non-metallic products for use in contact with water intended for human consumption with regard to their effect on the quality of the water'.

The reference relates solely to its effect on the quality of the water with which it may come into contact and does not signify the approval of its mechanical or physical properties for any use.

5560 **SOLVENT CEMENTS**

Tangit All Pressure. Grey coloured solvent cement intended to join PVC-U pipe and fittings. Apply as per manufacturer's instructions. Cure for 20 days at 23°C. For use with water up to 23°C.

APPROVAL NUMBER: 1206557

APPROVAL HOLDER: GEORGE FISCHER SALES LTD.

The Scheme reserves the right to review approval. This approval is valid between June 2012 and June

An entry, as above, will accordingly be included in the Water Fittings Directory on-line under the section headed, "Materials which have passed full tests of effect on water quality".

The Directory may be found at: www.wras.co.uk/directory

Yours faithfully

Jason Furnival

Approvals & Enquiries Manager

Water Regulations Advisory Scheme

The Water Regulations Advisory Scheme Ltd Registered in England No. 06663930 Registered Office: 1 Queen Anne's Gate, London SW1H 9BT

The material referred to in this letter is suitable for contact with water for domestic purposes. Approval of this material does not signify the approval of its mechanical or physical properties for any use.

Manufacturers or applicants may only quote in their sales literature terms which are used in this letter, namely that; 'the material as listed, having passed the tests of effect on water quality, is suitable for use in contact with wholesome water'

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Modifications to existing Approvals

It is a condition of WRAS Material Approval that <u>NO</u> changes or modifications to the Approved Material, be made without the Approval Holder first notifying WRAS Ltd. Full details of the proposed changes must be provided to the Scheme. Failure to comply with this condition will immediately invalidate a previously granted Approval.

Re-Approval

WRAS will write to you 1 year before the approval expires asking whether you would like to renew it. Please complete the relevant section of the MA3 application form which will be included with the letter and return to WRAS (via e-mail or post).



ASCO JOUCOMATIC LTD

has had the undermentioned product examined, tested and found, when correctly installed, to comply with the requirements of the United Kingdom Water Supply (Water Fittings) Regulations/Scottish Water Byelaws.

`SCG238A044BW` & `SCG238A046BW` SOLENOID VALVES (NON-WHOLESOME WATER USE ONLY)

This certificate by itself is not evidence of a valid WRAS Approval. Confirmation of the current status of an approval must be obtained from the WRAS Directory (www.wras.co.uk/directory)

The product so mentioned will be listed in the Water Fittings and Materials Directory for a period until:

31 MARCH

2019

1403061

Certificate No.

Chairman, Product Approval Group





HUBA CONTROL AG

has had the undermentioned product examined, tested and found, when correctly installed, to comply with the requirements of the United Kingdom Water Supply (Water Fittings) Regulations/Scottish Water Byelaws.

TYPE 200, 201, 210, 211, 230, 235 & 236 FLOW SENSORS

This certificate by itself is not evidence of a valid WRAS Approval. Confirmation of the current status of an approval must be obtained from the WRAS Directory (www.wras.co.uk/directory)

The product so mentioned will be listed in the Water Fittings and Materials Directory for a period until:

30

APRIL

2019

1404069

Certificate No.

Chairman, Product Approval Group





PENTAIR INTERNATIONAL

has had the undermentioned product examined, tested and found, when correctly installed, to comply with the requirements of the United Kingdom Water Supply (Water Fittings) Regulations/Scottish Water Byelaws.

'C' & 'RT' RANGES OF VESSELS

This certificate by itself is not evidence of a valid WRAS Approval. Confirmation of the current status of an approval must be obtained from the WRAS Directory (www.wras.co.uk/directory)

The product so mentioned will be listed in the Water Fittings and Materials Directory for a period until:

30

APRIL

2019

1404336

Certificate No.

Chairman, Product Approval Group





LANXESS Deutschland GmbH / 51369 Leverkusen, Germany

To whom it may concern

Food Contact Statement Lewatit[®] S 1567

With respect to Europe

Regulation (EC) 1935/2004 (Framework Regulation)

We hereby confirm that the above-mentioned product, when used and preconditioned according to the manufacturer's instructions, meets the relevant requirements laid down in Regulation (EC) No 1935/2004 of the European Parliament and of the Council of 27 October 2004 on materials and articles intended to come into contact with food and repealing Directives 80/590/EEC and 89/109/EEC.

Regulation (EU) 10/2011 (Plastics Regulation)

Please be informed, that ion exchange products are explicitly excluded from the scope of the European Plastics Regulation.

Council of Europe Resolution ResAP (2004)3

Above mentioned Lewatit[®] product is manufactured in accordance with a certified Quality Assurance System and in accordance with the recommendations of the Resolution ResAP (2004)3 of the Council of Europe on ion exchange and adsorbents resins used in the processing of foodstuffs. Particularly only substances are used for manufacturing which are listed in the technical document no. 1 of the Resolution.

Commission Regulation (EC) 2023/2006 (GMP)

We inform you that the production of the above-mentioned product is systematically reviewed with regards to good manufacturing practice (GMP) using the ISO 9001 system as well as our internal HACCP system, and following the Cefic SOIA internal guideline specifically dedicated to GMP. Therefore we can state that the above-mentioned product meets the relevant requirements laid down in Commission Regulation (EC) 2023/2006.

April 26, 2012

LANXESS Deutschland GmbH

Gritt Hamsen Industrial & Environmental Affairs Product Stewardship G19 / R. 503 51369 Leverkusen, Germany

Phone+49 214 30-27330 Fax+49 214 30-25671 gritt.hamsen@lanxess.com www.lanxess.com

Executive Board:
Dr. Axel C. Heitmann
(Chairman)
Dr. Werner Breuers
Dr. Bernhard Düttmann
Dr. Rainier van Roessel

Chairman of the Supervisory Board: Dr. Rolf Stomberg

Registered Office: Leverkusen Local Court Köln HRB 52600 VAT ID no. DE 814 000 384



With respect to USA

Gritt Hamsen

FDA

We confirm that **Lewatit**® **S 1567** is in chemical compliance with FDA 21 CFR §173.25. Please note that a resin which meets the requirements with respect to its composition must be pre-treated by the user in accordance with the manufacturer's instructions and must comply with the extraction limits described under 21 CFR §173.25(c). For **Lewatit**® **S 1567** the exemptions in 21 CFR §173.25 (d)(1) apply.

April 26, 2012 Food Contact Statement Page 2 of 2

Drinking water certifications

Lewatit® **S 1567** is tested and certified under BS 6920 by WRAS (UK) and is also approved by the Water Quality Association (WQA) according to ANSI/NSF 61 Standard "Drinking Water System Components - Health Effects". Additionally **Lewatit**® **S 1567** is approved by the French authorities (Direction Générale de la Santé, DGS).

Please note:

The user of **Lewatit® S 1567** is responsible to check the ability of the resin for the intended use.

Lewatit® S 1567 corresponds with the technical data and recommendations given in the relevant Lewatit Product Information and Technical Information.

For further information concerning the application, please contact your local LANXESS Affiliate.

Yours sincerely,

LANXESS Deutschland GmbH

Gritt Hamsen

Industrial & Environmental Affairs

Product Stewardship

This information and our technical advice - whether verbal, in writing or by way of trials - are given in good faith but without warranty, and this also applies where proprietary rights of third parties are involved. Our advice does not release you from the obligation to check its validity and to test our products as to their suitability for the intended processes and uses. The application, use and processing of our products and the products manufactured by you on the basis of our technical advice are beyond our control and, therefore, entirely your own responsibility. Our products are sold in accordance with the current version of our General Conditions of Sale and Delivery.



HL/NA

Test Report: MAT/LAB 392D



3rd October 2011

Durapipe UK, Walsall Road, Norton Canes, Cannock. Staffs. **WS11 9NS**

WATER REGULATIONS ADVISORY SCHEME (WRAS) MATERIAL APPROVAL

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POLYVINYLCHLORIDE (PVC, PVC-U AND CPVC) - COMPONENTS

5300

FIP PVC-U fittings and valves. Grey coloured, injection moulded components manufactured from PVC-U. For use with water up to 23°C.

APPROVAL NUMBER: 1109516

APPROVAL HOLDER:

DURAPIPE UK

The Scheme reserves the right to review approval. This approval is valid between September 2011 and September 2016.

An entry, as above, will accordingly be included in the Water Fittings Directory on-line under the section headed, "Materials which have passed full tests of effect on water quality".

The Directory may be found at: www.wras.co.uk/directory

Yours faithfully

Jason Furnival

Approvals & Enquiries Manager Water Regulations Advisory Scheme

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Re-Approval

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