

Welspun^W EUROPE

**CERTIFICADOS DE
ALIMENTARIEDAD
ABASTECIMIENTO**

Welspun Flow



Estimado cliente,

Adjuntamos documentación técnica referente a nuestro producto de abastecimiento, clasificada de la siguiente forma:

Nota: Dado que en España no existe un registro específico de materiales autorizados para el uso en contacto con agua de consumo humano, el ministerio correspondiente recomienda que los productos en contacto con el agua de consumo humano cuenten con certificados de otros países con estándares europeos o asimilables.

- Certificado de alimentariead WRAS
 - Tuberías y subproductos que lo componen según indica la NORMA EN 545 en vigor, según normativa europea.
 - EN 545:2010, EN 545:2006, ISO 2531:2009, ISO 4179:2024, ISO 8179:2017.
- Certificado de alimentariiedad ACS
 - Tuberías y subproductos que lo componente según indica la NORMA EN 545 en vigor, según normativa europea.
- Ensayos de migración según RD 3/2023
 - Mortero de cemento, realizado en Reino Unido (BS6920).
 - NSF-OPC (Cemento Portland).
 - NSF-SRC (Sulfato Resistente).
 - NSF-BFSL (Cemento de alto horno).
- Ensayos completos según indica el RD3/2023 (con carta de declaración).
 - Anexo I:
 - Parte A. Parámetros microbiológicos.
 - Parte B. Parámetros químicos.
 - Parte C. Parámetros indicadores de calidad.
 - Parte D. Características organolépticas.
- Certificado de cumplimiento de Directiva Europea 98/83/CE, 2020/2184, RD 3/2023.
 - Certificado de potabilidad del agua empleado en el mortero de cemento.

En caso de requerir documentación adicional, no dude en contactar con nosotros.

J. Raúl Bartolomé
Director Comercial WELSPUN EUROPE, S.A.
Teléfono: +34 667 478 506



ALIMENTARIEDAD WRAS



Approval Number 2104556
Test Report: J-00385608



20th October 2021

Berger Paints India Limited
14 & 15 Swarnamoyee Road,
Howrah - 711103,
West Bengal,
India

Water Regulations Approval Scheme Ltd.
Unit 13,
Willow Road,
Pen y Fan Industrial Estate,
Crumlin,
Gwent,
NP11 4EG

**WATER REGULATIONS APPROVAL SCHEME LTD. (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 BS6920-1:2000 and/or 2014 '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.

BITUMINOUS BASED PRODUCTS- PETROLEUM OR ASPHALTIC BITUMEN, NOT COAL TAR BITUMEN. MATERIALS 5021 CONTAINING PETROLEUM OR ASPHALTIC BITUMEN ARE NOT APPROVED FOR USE ON WATER-RETAINING STRUCTURES WITH LARGE SURFACE:VOLUME RATIO SUCH AS LINING OF PIPES, CISTERNS OR WATER STORAGE TANKS IN CONTACT WITH WHOLESOME WATER, BUT MAY BE ACCEPTABLE FOR USE WHERE THERE IS ONLY A SMALL SURFACE AREA IN CONTACT WITH THE WATER – E.G. TAPS, VALVES AND PIPE CONNECTORS.

'BPL HB QD Bitumen Black 60'. Factory applied, black coloured bituminous coating.
Apply and cure as per manufacturer's data sheet number '671' dated 'Apr-20'.

For use with water up to 60 °C.

APPROVAL NUMBER: 2104556
APPROVAL HOLDER: BERGER PAINTS INDIA LIMITED

The Scheme reserves the right to review approval.
Approval 2104556 is valid between April 2021 and April 2026

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.wrasapprovals.co.uk/approvals-directory/

Yours Faithfully

A handwritten signature in blue ink, appearing to read 'Ian Hughes', written over a light blue horizontal line.

Ian Hughes
WRAS Approvals Manager

Approval Number 2101522
Test Report: J-00368462



23rd November 2021

Shalimar Paints Limited
Nashik Mumbai NH Road,
Gonde,
Nashik,
Maharashtra 422403
India

Water Regulations Approval Scheme Ltd.
Unit 13,
Willow Road,
Pen y Fan Industrial Estate,
Crumlin,
Gwent,
NP11 4EG

**WATER REGULATIONS APPROVAL SCHEME LTD. (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 BS6920-1:2000 and/or 2014 '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.

BITUMINOUS BASED PRODUCTS- PETROLEUM OR ASPHALTIC BITUMEN, NOT COAL TAR BITUMEN, MATERIALS 5021 CONTAINING PETROLEUM OR ASPHALTIC BITUMEN ARE NOT APPROVED FOR USE ON WATER-RETAINING STRUCTURES WITH LARGE SURFACE:VOLUME RATIO SUCH AS LINING OF PIPES, CISTERNS OR WATER STORAGE TANKS IN CONTACT WITH WHOLESOME WATER, BUT MAY BE ACCEPTABLE FOR USE WHERE THERE IS ONLY A SMALL SURFACE AREA IN CONTACT WITH THE WATER – E.G. TAPS, VALVES AND PIPE CONNECTORS.

'Dicoat Medium Temp Black'. Factory applied, black coloured bitumen coating.

Apply as per manufacturer's user instructions reference 'SPL/RD/UI/2019100121', issue no. '01' dated 08.07.2020. Cure for 7 days@30°C.

Between 1st January 2021 to 22nd November 2021, the material is for use with water up to 50°C.
Between 23rd November 2021 and 31st January 2026, the material is for use with water up to 60°C.

This material is only approved for the curing conditions that appear on the approval. If the cure conditions are varied from those specified on the approval then the material is not covered by the scope of the approval.

**APPROVAL NUMBER: 2101522
APPROVAL HOLDER: SHALIMAR PAINTS LIMITED**

The Scheme reserves the right to review approval.
Approval 2101522 is valid between January 2021 and January 2026

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.wrasapprovals.co.uk/approvals-directory/

Yours Faithfully

A handwritten signature in blue ink, appearing to read 'Ian Hughes', written over a light blue horizontal line.

**Ian Hughes
WRAS Approvals Manager**

Approval Number 2212572
Test Report: J-00436232



4th December 2023

PC Chanda & Co. PVT Ltd.
Ravi Auto House,
103 Park Street,
6th Floor,
Kolkata 700016,
India

Water Regulations Approval Scheme Ltd.
Unit 13,
Willow Road,
Pen y Fan Industrial Estate,
Crumlin,
Gwent,
NP11 4EG

**WATER REGULATIONS APPROVAL SCHEME LTD. (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 BS6920-1:2000 and/or 2014 '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.

BITUMINOUS BASED PRODUCTS- PETROLEUM OR ASPHALTIC BITUMEN, NOT COAL TAR BITUMEN, MATERIALS 5021 CONTAINING PETROLEUM OR ASPHALTIC BITUMEN ARE NOT APPROVED FOR USE ON WATER-RETAINING STRUCTURES WITH LARGE SURFACE:VOLUME RATIO SUCH AS LINING OF PIPES, CISTERNS OR WATER STORAGE TANKS IN CONTACT WITH WHOLESOME WATER, BUT MAY BE ACCEPTABLE FOR USE WHERE THERE IS ONLY A SMALL SURFACE AREA IN CONTACT WITH THE WATER – E.G. TAPS, VALVES AND PIPE CONNECTORS.

'PCBIT III HIGHBUILD'. Factory applied, black coloured bituminous coating.

Apply as per manufacturer's instructions for use, reference 'PCC/ PC 820' dated 27.11.2023. Cure for 5 minutes@30°C. For use with water up to 23°C.

This material is only approved for the curing conditions that appear on the approval. If the cure conditions are varied from those specified on the approval then the material is not covered by the scope of the approval.

**APPROVAL NUMBER: 2212572
APPROVAL HOLDER: PC CHANDA & CO. PVT LTD.**

The Scheme reserves the right to review approval.
Approval 2212572 is valid between December 2022 and December 2027

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.wrasapprovals.co.uk/approvals-directory/

Yours Faithfully

A handwritten signature in blue ink, appearing to read 'Ian Hughes', with a horizontal line extending to the right.

**Ian Hughes
WRAS Approvals Manager**

Approval Number 2310550
Test Report: J-00465869



11th March 2024

Welspun DI Pipes Limited
Survey No, 615-619, 632-634 & 650, Welspun City,
Versamedi Village,
Taluka Anjar,
Kutch Anjar,
Kachchh,
Gujarat,
370110,
India

Water Regulations Approval Scheme Ltd.
Unit 13,
Willow Road,
Pen y Fan Industrial Estate,
Crumlin,
Gwent,
NP11 4EG

WATER REGULATIONS APPROVAL SCHEME LTD. (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 BS6920-1:2000 and/or 2014 '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.

COATINGS, PAINTS & LININGS- FACTORY APPLIED PIPE & FITTINGS COATINGS.

5030

'Welmortar-BFS'. Factory applied, grey coloured cement mortar.

Mix sand:cement:water in a 3:2:1 weight ratio and apply as per manufacturer's SOP document 'WDIPL/QAWI/14B', revision '01', dated '08.02.2023'. Cure for 28 days@30°C.

For use with water up to 65°C.

This material is only approved for the mixing and curing conditions that appear on the approval. If the mixing and/or curing conditions are varied from those specified on the approval then the material is not covered by the scope of the approval.

APPROVAL NUMBER: 2310550

APPROVAL HOLDER: WELSPUN DI PIPES LIMITED

The Scheme reserves the right to review approval.
Approval 2310550 is valid between October 2023 and October 2028

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.wrasapprovals.co.uk/approvals-directory/

Yours Faithfully

Ian Hughes
WRAS Approvals Manager

Approval Number 2310551
Test Report: J-00465873



11th March 2024

Welspun DI Pipes Limited
Survey No. 615-619, 632-634 & 650, Welspun City,
Versamedi Village,
Taluka Anjar,
Kutch Anjar,
Kachchh,
Gujarat,
370110,
India

Water Regulations Approval Scheme Ltd.
Unit 13,
Willow Road,
Pen y Fan Industrial Estate,
Crumlin,
Gwent,
NP11 4EG

WATER REGULATIONS APPROVAL SCHEME LTD. (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 BS6920-1:2000 and/or 2014 '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.

COATINGS, PAINTS & LININGS- FACTORY APPLIED PIPE & FITTINGS COATINGS.

5030

'Welmortar-SRP'. Factory applied, grey coloured cement mortar.

Mix sand:cement:water in a 3:2:1 weight ratio and apply as per manufacturer's SOP document 'WDIPL/QAWI/14C', revision '1', dated '08.02.2023'. Cure for 28 days@30°C.

For use with water up to 65°C.

This material is only approved for the mixing and curing conditions that appear on the approval. If the mixing and/or curing conditions are varied from those specified on the approval then the material is not covered by the scope of the approval.

APPROVAL NUMBER: 2310551

APPROVAL HOLDER: WELSPUN DI PIPES LIMITED

The Scheme reserves the right to review approval.

Approval 2310551 is valid between October 2023 and October 2028

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.wrasapprovals.co.uk/approvals-directory/

Yours Faithfully

Ian Hughes
WRAS Approvals Manager

Approval Number 2212530
Test Report: MA7814/O



Water Regulations Approval Scheme Ltd.
Unit 13,
Willow Road,
Pen y Fan Industrial Estate,
Crumlin,
Gwent,
NP11 4EG

6th January 2023

Welspun DI Pipes Limited
Survey No. 615-619, 632-634 & 650, Welspun City,
Versamedi Village,
Taluka Anjar,
Kutch Anjar,
Kachchh,
Gujarat,
370110,
India

**WATER REGULATIONS APPROVAL SCHEME LTD. (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 BS6920-1:2000 and/or 2014 '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.

COATINGS, PAINTS & LININGS- FACTORY APPLIED PIPE & FITTINGS COATINGS.

5030

'Welmortar-III'. Factory applied, grey coloured cement mortar.

Mix cement, sand and water in a mass ratio of 2:3:0.85. Apply as per manufacturer's Standard Operating Procedure 'WDIPL/QA/WI/14A', revision '0', dated '01.10.2021'. Cure for 21 days at 30°C & 70% humidity.

For use with water up to 65°C.

This material is only approved for the mixing and curing conditions that appear on the approval. If the mixing and/or curing conditions are varied from those specified on the approval then the material is not covered by the scope of the approval.

APPROVAL NUMBER: 2212530

APPROVAL HOLDER: WELSPUN DI PIPES LIMITED

The Scheme reserves the right to review approval.
Approval 2212530 is valid between December 2022 and December 2027

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.wrasapprovals.co.uk/approvals-directory/

Yours Faithfully

Ian Hughes
WRAS Approvals Manager

Approval Number 2103516
Test Report: J-00370864



19th March 2021

PC Chanda & Co. PVT Ltd.
Ravi Auto House,
103 Park Street,
6th Floor,
Kolkata 700016,
India

Water Regulations Advisory Scheme Ltd.
Unit 13,
Willow Road,
Pen y Fan Industrial Estate,
Crumlin,
Gwent,
NP11 4EG

**WATER REGULATIONS ADVISORY SCHEME LTD. (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 BS6920-1:2000 and/or 2014 '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.

COATINGS, PAINTS & LININGS- FACTORY APPLIED PIPE & FITTINGS COATINGS.

5030

'Edelpoxy FN 132 Blue Coating'. Factory applied, blue coloured epoxy coating. Apply as per manufacturer's instructions dated 'January 28, 2020'. Cure for 7 days@30°C. For use with water up to 85°C.

This material is only approved for the curing conditions that appear on the approval. If the cure conditions are varied from those specified on the approval then the material is not covered by the scope of the approval.

APPROVAL NUMBER: 2103516

APPROVAL HOLDER: PC CHANDA & CO. PVT LTD.

The Scheme reserves the right to review approval.
Approval 2103516 is valid between March 2021 and March 2026

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.wrasapprovals.co.uk/approvals-directory/

Yours Faithfully

A handwritten signature in blue ink, appearing to read 'Ian Hughes', with a horizontal line extending to the right.

Ian Hughes
WRAS Approvals Manager

Approval Number 2212572
Test Report: J-00436232



4th December 2023

PC Chanda & Co. PVT Ltd.
Ravi Auto House,
103 Park Street,
6th Floor,
Kolkata 700016,
India

Water Regulations Approval Scheme Ltd.
Unit 13,
Willow Road,
Pen y Fan Industrial Estate,
Crumlin,
Gwent,
NP11 4EG

**WATER REGULATIONS APPROVAL SCHEME LTD. (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 BS6920-1:2000 and/or 2014 '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.

BITUMINOUS BASED PRODUCTS- PETROLEUM OR ASPHALTIC BITUMEN, NOT COAL TAR BITUMEN. MATERIALS 5021 CONTAINING PETROLEUM OR ASPHALTIC BITUMEN ARE NOT APPROVED FOR USE ON WATER-RETAINING STRUCTURES WITH LARGE SURFACE:VOLUME RATIO SUCH AS LINING OF PIPES, CISTERNS OR WATER STORAGE TANKS IN CONTACT WITH WHOLESOME WATER, BUT MAY BE ACCEPTABLE FOR USE WHERE THERE IS ONLY A SMALL SURFACE AREA IN CONTACT WITH THE WATER – E.G. TAPS, VALVES AND PIPE CONNECTORS.

'PCBIT III HIGHBUILD'. Factory applied, black coloured bituminous coating.

Apply as per manufacturer's instructions for use, reference 'PCC/ PC 820' dated 27.11.2023. Cure for 5 minutes@30°C. For use with water up to 23°C.

This material is only approved for the curing conditions that appear on the approval. If the cure conditions are varied from those specified on the approval then the material is not covered by the scope of the approval.

**APPROVAL NUMBER: 2212572
APPROVAL HOLDER: PC CHANDA & CO. PVT LTD.**

The Scheme reserves the right to review approval.
Approval 2212572 is valid between December 2022 and December 2027

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.wrasapprovals.co.uk/approvals-directory/

Yours Faithfully

**Ian Hughes
WRAS Approvals Manager**

Approval Number 240655006
Test Report: J-00485760 & J-00488245



Water Regulations Approval Scheme Ltd.
Unit 13,
Willow Road,
Pen y Fan Industrial Estate,
Crumlin,
Gwent,
NP11 4EG

6th June 2024

Allianz Elastomer
Opp.-Samarpan Lamination,
Rajpar Road AT-Sakatsanla,
Morbi 363641 Gujarat,
India

WATER REGULATIONS APPROVAL SCHEME LTD. (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 BS6920-1:2000 and/or 2014 '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.

RUBBERS- ETHYLENE PROPYLENE DIENE MONOMER (EPDM) - MATERIAL ONLY.

5365

'AEC 2/EPDM-50, AEC 3/EPDM-60, AEC 4/EPDM-70 & AEC.A5/EPDM-80'. Black coloured, compression moulded EPDM materials. Shore hardness between 50 & 80. Tested in-radius size 1.0mm. For use with water up to 65°C.

APPROVAL NUMBER: 240655006

APPROVAL HOLDER: ALLIANZ ELASTOMER

The Scheme reserves the right to review approval.
Approval 240655006 is valid between June 2024 and June 2029

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.wrasapprovals.co.uk/approvals-directory/

Yours Faithfully

Ian Hughes
WRAS Approvals Manager

Approval Number 2303506
Test Report: MAT/LAB 310A, 312A rev.1 & J-00370665



Water Regulations Approval Scheme Ltd.
Unit 13,
Willow Road,
Pen y Fan Industrial Estate,
Crumlin,
Gwent,
NP11 4EG

22nd December 2022

Holdwell Components Private Ltd.
Plot No. 64-A, Sector-C,
Urfa Industrial Area,
Raipur,
Chhattisgarh
India
492003

**WATER REGULATIONS APPROVAL SCHEME LTD. (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 BS6920-1:2000 and/or 2014 '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.

RUBBERS- ETHYLENE PROPYLENE DIENE MONOMER (EPDM) - MATERIAL ONLY.

5365

'HW-EPDM'. Black coloured, compression moulded EPDM sheet materials.

Shore hardness 50, 60, 70 and 80. Tested in-radius size 1.0mm.

The 50 shore hardness material is for use with water up to 65°C.

The 60, 70 & 80 shore hardness materials are for use with water up to 60°C.

APPROVAL NUMBER: 2303506

APPROVAL HOLDER: HOLDWELL COMPONENTS PRIVATE LTD.

This is a re-approval of 1802507 which is valid between February 2018 and January 2023.

The Scheme reserves the right to review approval.

Approval 2303506 is valid between March 2023 and March 2028

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.wrasapprovals.co.uk/approvals-directory/

Yours Faithfully

Ian Hughes
WRAS Approvals Manager

Approval Number 2203503
Test Report: M107193



17th January 2022

Thomas Grozier and Son Pty. Ltd.
2/8 Prince William Drive
Severn Hills
New South Wales 2147
Australia

Water Regulations Approval Scheme Ltd.
Unit 13,
Willow Road,
Pen y Fan Industrial Estate,
Crumlin,
Gwent,
NP11 4EG

**WATER REGULATIONS APPROVAL SCHEME LTD. (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 BS6920-1:2000 and/or 2014 '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.

LUBRICANTS

5160

'BK Standard Lubricant'. Clear (colourless), translucent, soap based lubricant paste. For use with water up to 60°C.

APPROVAL NUMBER: 2203503

APPROVAL HOLDER: THOMAS GROZIER AND SON PTY. LTD.

This is a re-approval of 1702543 which is valid between February 2017 and February 2022.

The Scheme reserves the right to review approval.

Approval 2203503 is valid between March 2022 and March 2027

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.wrasapprovals.co.uk/approvals-directory/

Yours Faithfully

Ian Hughes
WRAS Approvals Manager



ALIMENTARIEDAD ACS



CARSO - LABORATOIRE SANTÉ ENVIRONNEMENT HYGIÈNE DE LYON

Laboratoire Agréé pour les analyses d'eaux par le Ministère de la Santé

Laboratoire habilité par le Ministère chargé de la santé en application de l'article R*. 1321-52 du code de la santé publique

ATTESTATION DE CONFORMITE SANITAIRE (ACS)

Certificate of sanitary conformity

Conformément à l'arrêté du 29 mai 1997 modifié et aux circulaires du Ministère de la santé
DGS/VS4 n° 99/217 du 12 avril 1999 et DGS/VS4 n° 2000/232 du 27 avril 2000

Coordonnées du demandeur / Contact details of the ACS owner : P C Chanda & Co Pvt Ltd Ravi Auto House 103, Park Street 6th Floor Kolkata – 700 016 INDE	Nom(s) commercial(aux) du produit fini / Commercial name(s) of the finished product : Edelpoxy FN 132
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Type de produit fini / Type of finished product :		
<input type="checkbox"/> tube / pipe	<input type="checkbox"/> joint / seal, gasket, o-ring...	<input checked="" type="checkbox"/> revêtement / coating
<input type="checkbox"/> produit de jointoyage / sealing product	<input type="checkbox"/> raccord et manchon / fittings	<input type="checkbox"/> composant d'accessoires / accessories component
<input type="checkbox"/> autre / other :		
Nature du matériau / Type of material :		
<input type="checkbox"/> polychlorure de vinyl PVC	<input type="checkbox"/> polybutylène PB	<input type="checkbox"/> éthylène-propylène EPDM
<input type="checkbox"/> PVC surchloré PVC-C	<input type="checkbox"/> polyamide PA	<input type="checkbox"/> butadiène-acrylonitrile NBR
<input type="checkbox"/> polyéthylène PE	<input type="checkbox"/> polytétrafluoroéthylène PTFE	<input type="checkbox"/> autre / other :
<input type="checkbox"/> polyéthylène réticulé PEX	<input type="checkbox"/> acrylonitrile-butadiène-styrène ABS	
<input type="checkbox"/> polypropylène PP	<input checked="" type="checkbox"/> à base de résine époxydique / epoxy resin	
Commentaires / Comments : Renouvellement / Renewal 15 MAT LY 082		
Couleur du matériau / material color : bleue / blue		
N° de dossier attribué par le laboratoire habilité / File reference : 20 MAT LY 127		

Formulation chimique / Chemical formulation : Vérifiée par le laboratoire et conforme aux listes positives. <i>Checked by the laboratory and conform to the positive lists.</i>
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Essais d'inertie réalisés selon la norme XP P 41-250 / Migration tests performed according to the standard XP P 41-250 : Rapport S/V testé / S/V tested ratio : 3 cm ² /L Date des essais / Tests date : / Commentaires : La composition chimique du matériau n'ayant pas évolué et étant toujours conforme aux listes positives, de nouveaux essais d'inertie ne sont pas nécessaires. Les essais réalisés en 2015 restent valables et conformes. <i>Comments : The chemical composition of the material did not change and it is still in compliance with our positive lists. New testings are not requested ; those performed in 2015 remain valid and compliant.</i>
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Attestation délivrée par / Certificate issued by : Christelle AUTUGELLE Responsable MCDE CARSO - L.S.E.H.L.	Signature : 
A la date du / Date of issue : 10 Août 2020	
Date d'expiration de l'ACS / Expiry date : 17 Juillet 2025	
Commentaires / Comments : /	

F_MC058-c 15/09/2014 MLN

Société par action simplifiée au capital de 2 283 622,38 Euros - RCS Lyon B 410 545 313 - SIRET 410 545 313 00042 - APE 743 B - N° TVA - FR 82 410 545 313

Siège Social et laboratoire : 4, avenue Jean Moulin - CS 30228 - F - 69633 VENISSIEUX cedex - Tél. : (33) 04 72 76 16 16 - Fax : (33) 04 78 72 35 03

Site web : www.groupecarso.com - e-mail : mcde@groupecarso.com

CARSO - LABORATOIRE SANTÉ ENVIRONNEMENT HYGIÈNE DE LYON

Laboratoire Agréé pour les analyses d'eaux par le Ministère de la Santé

Lyon, le 03 Juillet 2025

Christelle AUTUGELLE
Phone : 00 33 4 37 65 29 62
Fax : 00 33 4 37 65 29 53
cautugelle@groupecarso.com

P C Chanda & Co Pvt Ltd

Mr Anjan Ghosh
Ravi Auto House
103, Park Street
6th Floor
Kolkata – 700 016
INDE

Objet : Renouvellement d'ACS
V/Ref. : Demande du 26/04/2025

Monsieur Anjan Ghosh

Par la présente, je confirme avoir reçu de la part de la société **P C Chanda & Co Pvt Ltd**, la demande de renouvellement de l'Attestation de Conformité Sanitaire (ACS) **20 MAT LY 127** délivrée sur le produit :

Edelpoxy FN 132

Conformément à la circulaire DGS/VS4 n° 2000/232 du 27 avril 2000, un délai de un an est prévu pour le renouvellement de cette ACS et ce, à compter de la date de demande de renouvellement qui doit intervenir 6 mois avant la date d'expiration des ACS.

Cette ACS devra donc être renouvelée **avant le 17 Janvier 2026**. Pendant cette période, l'ACS reste **valable**.

L'étude de la composition du produit est terminée et les essais nécessaires au renouvellement de l'ACS vont être engagés.

Je reste à votre disposition pour tout complément d'information et vous prie d'agréer, Monsieur Anjan Ghosh, l'expression, de mes salutations distinguées.



Christelle AUTUGELLE
Responsable Laboratoire MCDE
Materials' Laboratory Manager

CARSO - LABORATOIRE SANTÉ ENVIRONNEMENT HYGIÈNE DE LYON

Laboratoire Agréé pour les analyses d'eaux par le Ministère de la Santé

Laboratoire habilité par le Ministère chargé de la santé en application de l'article R*.1321-52 du code de la santé publique

CERTIFICAT DE CONFORMITE

AUX LISTES POSITIVES DE REFERENCE

Certificate of conformity to positive lists

Conformément à l'arrêté du 29 mai 1997 modifié, aux circulaires du Ministère chargé de la santé
DGS/VS4 n° 99/217 du 12 avril 1999 et DGS/VS4 n° 2000/232 du 27 avril 2000
et aux avis parus au Journal Officiel du 24 février 2012 (texte n°119) et du 23 janvier 2018 (texte n°97)

Coordonnées du demandeur : / Contact details of the ACS owner THOMAS GROZIER & SON PTY LTD 2/8 Prince William Drive SEVEN HILLS, NSW 2147 AUSTRALIA	Nom(s) commercial(aux) du produit fini : / Commercial name(s) of the finished product BK STANDARD PIPE JOINTING LUBRICANT
--	--

Type de produit fini / Type of finished product :

<input checked="" type="checkbox"/> Lubrifiant / Lubricant	<input type="checkbox"/> Ajout ou Adjuvant organique pour ciment / Organic cement admixture
<input type="checkbox"/> Graisse / Grease	<input type="checkbox"/> Revêtement à base de ciment / Cementitious coating
<input type="checkbox"/> Colle / Glue	<input type="checkbox"/> Joint diamètre inférieur à 63 mm / Seal, gasket, o-ring with a diameter lower than 63mm
<input type="checkbox"/> Autre / Other :	

Commentaires / Comments : /
Couleur du produit / Product color : transparent / clear gel

N° de dossier attribué par le laboratoire habilité / File reference : **24 CLP LY 036**

Formulation chimique / Chemical formulation :

La formulation chimique vérifiée par le laboratoire est conforme aux listes positives de référence. Ce certificat est établi sous réserve de la non-modification de la composition chimique du produit et des préparations commerciales qui le constituent. Il peut par ailleurs être remis en cause par l'évolution des listes positives.
The chemical formulation checked by the laboratory is conform to the positive lists. This certificate is issued provided that chemical composition of the product (and commercial preparations that constitute it) stays unmodified. It can also be reconsidered by the positive lists evolution.

Remarque / Remark : /

Attestation délivrée par / Certificate issued by : Christelle AUTUGELLE Responsable Laboratoire MCDE CARSO - L.S.E.H.L.	Signature : 
A la date du / Date of issue : 17 Juin 2024	
Date d'expiration du CLP / Expiry date : 17 Juin 2029	
Commentaires / Comments : /	

F_MC130_4 rédaction : CAU / validation : SFR / approbation : ALC - 17/08/2018

Société par action simplifiée au capital de 2 000 000 Euros - RCS Lyon B 410 545 313 - SIRET 410 545 313 00042 - APE 7120 B - N° TVA : FR 82 410 545 313

Siège Social et laboratoire : 4, avenue Jean Moulin - CS 30228 - F - 69633 VENISSIEUX cedex - Tél. : (33) 04 72 76 16 16 - Fax : (33) 04 78 72 35 03

Site web : www.groupecarso.com - e-mail : mcde@groupecarso.com

CARSO - LABORATOIRE SANTÉ ENVIRONNEMENT HYGIÈNE DE LYON

Laboratoire Agréé pour les analyses d'eaux par le Ministère de la Santé

ATTESTATION DE CONFORMITE SANITAIRE (ACS)

Certificate of sanitary conformity

Conformément à l'arrêté du 29 mai 1997 modifié et aux circulaires du Ministère de la santé

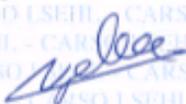
DGS/VS4 n° 99/217 du 12 avril 1999 et DGS/VS4 n° 2000/232 du 27 avril 2000

Coordonnées du demandeur / Contact details of the ACS owner : HOLDWELL COMPONENTS PVT. LTD. Plot No.64_A, Sector-C Urla Industrial Area Raipur (Chhattisgarh) INDE	Nom(s) commercial(aux) du produit fini / Commercial name(s) of the finished product : HW 50
---	--

Type de produit fini / Type of finished product :		
<input type="checkbox"/> tube / pipe	<input type="checkbox"/> Réservoirs / Storage systems	<input checked="" type="checkbox"/> joint / seal, gasket, o-ring...
<input type="checkbox"/> revêtement pour tubes / coating for pipes	<input type="checkbox"/> Produits pour réservoirs / Products for storage systems	<input checked="" type="checkbox"/> composant d'accessoires / accessories component
<input type="checkbox"/> produit de jointoyage / sealing product	<input type="checkbox"/> raccord et manchon / fittings	<input type="checkbox"/> autre / other :
Nature du matériau / Type of material :		
<input type="checkbox"/> polychlorure de vinyl PVC	<input type="checkbox"/> polybutylène PB	<input checked="" type="checkbox"/> éthylène-propylène EPDM
<input type="checkbox"/> PVC surchloré PVC-C	<input type="checkbox"/> polyamide PA	<input type="checkbox"/> butadiène-acrylonitrile NBR
<input type="checkbox"/> polyéthylène PE	<input type="checkbox"/> polytétrafluoroéthylène PTFE	<input type="checkbox"/> autre / other : silicone
<input type="checkbox"/> polyéthylène réticulé PEX	<input type="checkbox"/> acrylonitrile-butadiène-styrène ABS	
<input type="checkbox"/> polypropylène PP	<input type="checkbox"/> à base de résine époxydique / epoxy resin	
Température(s) d'utilisation / Temperature(s) for the use :		
<input checked="" type="checkbox"/> Eau froide / Cold water	<input checked="" type="checkbox"/> Eau chaude / Warm water	<input type="checkbox"/> Eau très chaude / Hot water
Commentaires / Comments : renouvellement / renewal 16 MAT LY 216		
Couleur du matériau / Material color : noire / black		
N° de dossier attribué par le laboratoire habilité / File reference :		21 MAT LY 218

Formulation chimique / Chemical formulation : Vérfiée par le laboratoire et conforme aux listes positives Checked by the laboratory and conform to the positive lists
--

Essais de migration réalisés selon les normes NF EN 1420, NF EN 13052-1 & NF EN 12873-1 ou -2: Migration tests performed according to the standards NF EN 1420, NF EN 13052-1 & NF EN 12873-1 or -2 : Rapport S/V testé / S/V tested ratio : 1.5 dm ⁻¹ (NF EN 1420, NF EN 13052-1) & 5.1 dm ⁻¹ (NF EN 12873-1) Facteur de conversion associé / Associated conversion factor : 0.2 day/dm Date des essais / Tests date : du 26 Novembre 2021 au 18 Janvier 2022 / from November 26 To January 18, 2022 Commentaires : Les essais d'inertie n'ont fait apparaître aucune anomalie. Les résultats sont conformes aux critères d'acceptabilité fixés en annexe 1. Comments : The migration tests do not bring out any anomaly. The results are in accordance with the acceptance criteria set out in annex 1.

Attestation délivrée par / Certificate issued by : Christelle AUTUGELLE Responsable Laboratoire MCDE CARSO-LSEHL	Signature : 
A la date du / Date of issue : 26 Janvier 2022	
Date d'expiration de l'ACS / Expiry date : 26 Janvier 2027	
Commentaires / Comments :	

F_Mc164_1 Rédaction : CAU / Validation : SJB (Approbation : CBE - 03/02/2020)
Société par action simplifiée au capital de 2 283 622,38 euros - RCS Lyon B 410 545 313 - SIRET 410 545 313 00042 - APE 743 B - N° TVA : FR 82 410 545 313
Siège Social et laboratoire : 4, avenue Jean Moulin - CS 30228 - F - 69633 VENISSIEUX cedex - Tél. : (33) 04 72 76 16 16 - Fax : (33) 04 78 72 35 03
Site web : www.groupecarso.com - e-mail : mcde@groupecarso.com

CARSO - LABORATOIRE SANTÉ ENVIRONNEMENT HYGIÈNE DE LYON

Laboratoire Agréé pour les analyses d'eaux par le Ministère de la Santé

ATTESTATION DE CONFORMITE SANITAIRE (ACS)

Certificate of sanitary conformity

Conformément à l'arrêté du 29 mai 1997 modifié et aux circulaires du Ministère de la santé

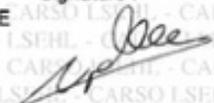
DGS/VS4 n° 99/217 du 12 avril 1999 et DGS/VS4 n° 2000/232 du 27 avril 2000

Coordonnées du demandeur / Contact details of the ACS owner : HOLDWELL COMPONENTS PVT. LTD. Plot No.64_A, Sector-C Urla Industrial Area Raipur (Chhattisgarh) INDE	Nom(s) commercial(aux) du produit fini / Commercial name(s) of the finished product : HW 80
---	--

Type de produit fini / Type of finished product :		
<input type="checkbox"/> tube / pipe	<input type="checkbox"/> Réservoirs / Storage systems	<input checked="" type="checkbox"/> joint / seal, gasket, o-ring...
<input type="checkbox"/> revêtement pour tubes / coating for pipes	<input type="checkbox"/> Produits pour réservoirs / Products for storage systems	<input checked="" type="checkbox"/> composant d'accessoires / accessories component
<input type="checkbox"/> produit de jointoyage / sealing product	<input type="checkbox"/> raccord et manchon / fittings	<input type="checkbox"/> autre / other :
Nature du matériau / Type of material :		
<input type="checkbox"/> polychlorure de vinyl PVC	<input type="checkbox"/> polybutylène PB	<input checked="" type="checkbox"/> éthylène-propylène EPDM
<input type="checkbox"/> PVC surchloré PVC-C	<input type="checkbox"/> polyamide PA	<input type="checkbox"/> butadiène-acrylonitrile NBR
<input type="checkbox"/> polyéthylène PE	<input type="checkbox"/> polytétrafluoroéthylène PTFE	<input type="checkbox"/> autre / other : silicone
<input type="checkbox"/> polyéthylène réticulé PEX	<input type="checkbox"/> acrylonitrile-butadiène-styrène ABS	
<input type="checkbox"/> polypropylène PP	<input type="checkbox"/> à base de résine époxydique / epoxy resin	
Température(s) d'utilisation / Temperature(s) for the use :		
<input checked="" type="checkbox"/> Eau froide / Cold water	<input checked="" type="checkbox"/> Eau chaude / Warm water	<input type="checkbox"/> Eau très chaude / Hot water
Commentaires / Comments : renouvellement / renewal 18 MAT LY 012		
Couleur du matériau / Material color : noire / black		
N° de dossier attribué par le laboratoire habilité / File reference : 22 MAT LY 347		

Formulation chimique / Chemical formulation : Vérifiée par le laboratoire et conforme aux listes positives Checked by the laboratory and conform to the positive lists

Essais de migration réalisés selon les normes NF EN 1420, NF EN 13052-1 & NF EN 12873-1 ou -2: Migration tests performed according to the standards NF EN 1420, NF EN 13052-1 & NF EN 12873-1 or -2 :
Rapport S/V testé / S/V tested ratio : 1.5 dm ⁻¹ (NF EN 1420, NF EN 13052-1) & 5.3 dm ⁻¹ (NF EN 12873-1)
Facteur de conversion associé / Associated conversion factor : 0.2 day/dm
Date des essais / Tests date : du 18 Novembre 2022 au 31 Janvier 2023 / from November 18, 2022 to January 31, 2023
Commentaires : Les essais d'inertie n'ont fait apparaître aucune anomalie. Les résultats sont conformes aux critères d'acceptabilité fixés en annexe 1. Comments : The migration tests do not bring out any anomaly. The results are in accordance with the acceptance criteria set out in annex 1.

Attestation délivrée par / Certificate issued by : Christelle AUTUGELLE Responsable Laboratoire MCDE CARSO-LSEHL	Signature : 
A la date du / Date of issue : 07 Avril 2023	
Date d'expiration de l'ACS / Expiry date : 07 Avril 2028	
Commentaires / Comments :	

F_MQ184 - Réaction CALLY (validation) SFR / Accreditation : CBE - 0903/2020
Site Social et laboratoire : 4, avenue Jean Moulin - CS 30228 - P - 69633 VENISSIEUX cedex - Tél : (33) 04 72 76 16 16 - Fax : (33) 04 78 72 35 03
Site web : www.groupecarso.com - e-mail : mcde@groupecarso.com

Laboratoire habilité par le Ministère chargé de la santé en application de l'article R*.1321-52 du code de la santé publique

CERTIFICAT DE CONFORMITE AUX LISTES POSITIVES DE REFERENCE *Certificate of conformity to positive lists*

Conformément à l'arrêté du 29 mai 1997 modifié, aux circulaires du Ministère chargé de la santé
DGS/VS4 n° 99/217 du 12 avril 1999 et DGS/VS4 n° 2000/232 du 27 avril 2000
et aux avis parus au Journal Officiel du 24 février 2012 (texte n°119) et du 23 janvier 2018 (texte n°97)

Coordonnées du demandeur : Contact details of the ACS owner WELSPUN Europe S.A. Juan Esplandiu 11 3^a Planta 28007 MADRID Espagne	Nom(s) commercial(aux) du produit fini : Commercial name(s) of the finished product WELLMORTAR - BFS
--	---

Type de produit fini / Type of finished product :

<input type="checkbox"/> Lubrifiant / Lubricant	<input type="checkbox"/> Ajout ou Adjuvant organique pour ciment / Organic cement admixture
<input type="checkbox"/> Graisse / Grease	<input checked="" type="checkbox"/> Revêtement à base de ciment / Cementitious coating
<input type="checkbox"/> Colle / Glue	<input type="checkbox"/> Joint de diamètre inférieur à 63 mm / Seal, gasket, o-ring with a diameter lower than 63 mm
<input type="checkbox"/> Autre / Other	

Commentaires / Comments : /
Couleur du produit / Product color : grise / grey

N° de dossier attribué par le laboratoire habilité / File reference : **26 CLP LY 001**

Formulation chimique / Chemical formulation :

La formulation chimique vérifiée par le laboratoire est conforme aux listes positives de référence. Ce certificat est établi sous réserve de la non-modification de la composition chimique du produit et des préparations commerciales qui le constituent. Il peut par ailleurs être remis en cause par l'évolution des listes positives.

The chemical formulation checked by the laboratory is conform to the positive lists. This certificate is issued provided that chemical composition of the product (and commercial preparations that constitute it) stays unmodified. It can also be reconsidered by the positive lists evolution.

Remarque / Remark : /

Attestation délivrée par / Certificate issued by :	Christelle AUTUGELLE Responsable Laboratoire MCDE CARSO - L.S.E.H.L.	Signature : 
A la date du / Date of issue : 02 Janvier 2026		
Date d'expiration du CLP / Expiry date : 02 Janvier 2031		
Commentaires / Comments : /		



ENSAYOS DE MIGRACIÓN RD 3/2023



BS6920 Test Report

REPORT NO. MA7814/O

PAGE 1 OF 5 PAGES

Cement Mortar

Welmortar-III

CLIENT:	Welspun DI Pipes Limited Survey No. 650, Welspun City Versamedi Village Taluka Anjar Kutch Anjar Kachchh Gujarat 370110 India
CLIENT'S REFERENCE:	2281230012
PHOENIX NUMBER:	UK760-0032353
DATE	1 December 2022
WRITTEN BY:  MATTHEW BRIDGE ANALYST	REVIEWED BY:  JONATHAN ELLIX ANALYST

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation



ITS Testing Services (UK) Ltd, Academy Place, 1-9 Brook Street, Brentwood, Essex, CM14 5NQ
Company Registration number in England and Wales.

SML-F-16 Version 12

CEMENTITIOUS FACTORY APPLIED PRODUCTS

The samples were prepared in accordance with manufacturer's application instructions.

Samples prepared by	Welspun DI Pipes Limited, India
Composition/trade name of mortar/cement	Welmortar-III Cement mortar
Mode of preparation and application of the product	cement, sand and water were mixed in a ratio of 2 : 3 : 0.85 by mass until an consistent slurry was achieved and applied to the interior of a ductile iron pipe by centrifugal process. The product was then removed from the pipe and cast into blocks using steel moulds.
Aggressivity index of test water	12.46
Number of pre-conditioning 24 hour soaks (to reach a pH of < 9)	2
Application conditions	30°C
Curing conditions	21 days at 30°C & 70% humidity
Date of preparation of the samples	10 May 2022

Soak Profile:

SOAK NO.	pH
1	8.14
*2	8.38

* 72 hour soak

CEMENTITIOUS FACTORY APPLIED PRODUCTS

The samples were prepared in accordance with manufacturer's application instructions.

Samples prepared by	Welspun DI Pipes Limited, India
Composition/trade name of mortar/cement	Welmortar-III Cement mortar
Mode of preparation and application of the product	cement, sand and water were mixed in a ratio of 2 : 3 : 0.85 by mass until an consistent slurry was achieved and applied to the interior of a ductile iron pipe by centrifugal process. The product was then removed from the pipe and cast into blocks using steel moulds.
Aggressivity index of test water	12.46
Number of pre-conditioning 24 hour soaks (to reach a pH of < 9)	2
Application conditions	30°C
Curing conditions	21 days at 30°C & 70% humidity
Date of preparation of the samples	10 May 2022

Soak Profile:

SOAK NO.	pH
1	8.14
*2	8.38

* 72 hour soak

2. THE EXTRACTION OF METALS

Extraction temperature – 65°C

Date test commenced – 5 September 2022

Number of extracts – 7

Samples were tested in a cementitious material test water as described in BS6920-2.6: 2014 Section 4.4.

All analyses carried out on duplicate samples of the product as specified below

Aluminium, Antimony, Arsenic, Boron, Cadmium, Chromium, Iron, Lead, Manganese, Mercury, Nickel, Selenium:
Inductively coupled plasma – mass spectrometry (ICP-MS)

Extract 1

METAL	EXPRESSION OF THE RESULTS	MAX. ADMISSIBLE CONCENTRATION	REPORTING LIMIT	CONCENTRATION FINAL EXTRACT		DETERMINED REAGENT BLANKS
				I	II	
Aluminium	Al µg/L	200	20.0	110.0	115.0	< 20.0
Antimony	Sb µg/L	5	0.5	< 0.5	< 0.5	< 0.5
Arsenic	As µg/L	10	1.0	< 1.0	< 1.0	< 1.0
Boron	B µg/L	1000	100.0	< 100.0	< 100.0	<100.0
Cadmium	Cd µg/L	5	0.5	< 0.5	< 0.5	< 0.5
Chromium	Cr µg/L	50	5.0	6.60	19.1	< 5.0
Iron	Fe µg/L	200	20.0	24.9	30.8	< 20.0
Lead	Pb µg/L	10	1.0	< 1.0	< 1.0	< 1.0
Manganese	Mn µg/L	50	5.0	< 5.0	< 5.0	< 5.0
Mercury	Hg µg/L	1	0.1	< 0.1	< 0.1	< 0.1
Nickel	Ni µg/L	20	2.0	< 2.0	< 2.0	< 2.0
Selenium	Se µg/L	10	1.0	< 1.0	< 1.0	< 1.0

Extract 7

METAL	EXPRESSION OF THE RESULTS	MAX. ADMISSIBLE CONCENTRATION	REPORTING LIMIT	CONCENTRATION FINAL EXTRACT		DETERMINED REAGENT BLANKS
				I	II	
Aluminium	Al µg/L	200	20.0	142.0	128.0	< 20.0
Chromium	Cr µg/L	50	5.0	< 5.0	< 5.0	< 5.0
Iron	Fe µg/L	200	20.0	27.3	27.7	< 20.0

Comment - thus the samples of this product have been found to comply with the requirements of BS 6920: Part 1: clause 8 when extracted at 65°C.

CONCLUSION

The samples of the products referred to in this report have been tested in accordance with the methods specified in BS 6920: Part 2: 2014 "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: Methods of test" (including High Temperature Tests in accordance with BS 6920: Part 3: 2014) and the requirements of the Water Regulations Approval Scheme WRAS Material Guidance, Version 3.0 issued 3 May 2022.

This product has satisfied the criteria set out in BS 6920: Part 1: 2014 "Specification" and thus complies with the requirements of the Water Regulations Approval Scheme Tests of Effect on Water Quality (BS 6920: 2014): Extraction of Metals / High Temperature Tests (65°C).

NO OTHER TESTS WERE UNDERTAKEN ON THIS PRODUCT

N.B The results specified in this report relate only to the sample of the product submitted for testing. Any changes in the nature or source of ingredients and the process of manufacture or application could affect the suitability of the product for use in contact with potable water.

Materials and products intended for use by a public water supply company in the preparation or conveyance of water may need to satisfy more comprehensive toxicological requirements as set specified by the Drinking Water Inspectorate. These additional requirements are necessary to ensure legal compliance with Regulation 31 of Water Supply (Water Quality) Regulations 2000.

NOTE FOR WRAS

This cementitious product does not contain any organic additives and so has been tested in accordance with BS6920-2.6 'Extraction of Metals' only as required by BS6920-2.1: clause 6.14.2.1.1.

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By submitting this test request, unless otherwise agreed in writing, you (the client) accept and acknowledge that we (Intertek) will apply Simple Acceptance when establishing conformity of test results with any given specification, except where the given specification provides clear decision rules, which would take precedence.

Since the "Simple Acceptance" decision rule can have an associated probability of false acceptance as high as 50%, you are advised to review the guidance in the current version of ILAC G8 to understand the significance of the uncertainty of measurement in relation to any conformity statement we produce. Note that uncertainty estimates (budgets) are available on request. In the case of standard test methods, the published test precision would apply.



Unit 30 | Fern Close | Pen-Y-Fan Ind Est | Oakdale | Gwent | NP11 3EH | UK
Tel: +44 (0) 1495 236260 wales@nsf.org | www.nsf.org

TEST REPORT

Customer: C0771903

Welspun DI Pipes Limited
Survey No. 615, 616, 617, 618, 619, 632, 633,
634 and 650,
Welspun City
Versamedi Village, Anjar,
Kachchh, GJ 370110
India

Revised Report

Result Limited testing was undertaken on this product in accordance with BS 6920: Part 2: Section 2.1: 2014, clause 6.14.2.1 (Factory made cementitious products free from organic additives or organic coatings). This product has satisfied the criteria set out in BS 6920: Part 1: 2014 "Specification" and thus is suitable for use with hot (up to 65°C) and cold water.

Customer Name	Welspun DI Pipes Limited
Product	Welmortar-SRP
Test Undertaken	BS 6920: 2014 - 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
Job Number	J-00465873
Work Order Number	W0850084

Thank you for having your product tested by NSF Wales Ltd.

Please contact your Account Manager if you have any questions or concerns pertaining to this report.

Report Date 23-NOV-2023
Original issue date: 19-OCT-2023

Report Authorisation

Eleanor Burger - Senior Project Manager Labs



F120231123061104

J-00465873

Page 1 of 9

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Sample Details

Date of Receipt of Application Form	24/05/23
Date of Receipt of Product for Test	03/07/23
Front Cover Test Description	Limited testing was undertaken on this product in accordance with BS 6920: Part 2: Section 2.1: 2014, clause 6.14.2.1 (Factory made cementitious products free from organic additives or organic coatings).
Date Test Sample Prepared *	26/03/23
Product *	Welmortar-SRP
Nature of Material *	Cement
Date Test Sample Manufactured *	25/03/23
Batch Number *	BC25
Receipt Conditions	Good Condition
Receipt Packaging	BUBBLE WRAP
Product Manufacturer *	Welspun DI Pipes Limited
Product Manufacturing Site *	India
Tradename and Reference of Product *	Welmortar-SRP
Method of Manufacture *	Mixing
Typical Use of the Product *	Cement in contact with potable water.
Substrate *	N/A
Method of Application *	Centrifugal spinning then cast into blocks
Number and Thickness of Coats Applied *	One coat 50 x 50 mm (Cement:sand:water, 2:3:1 wt/wt)
Ambient Temperature at Time of Application *	30 °C
Curing Time *	28 days
Curing Temperature *	30 °C
Curing Place *	At the facilities of the manufacturer
Preparation and Curing Conditions in Accordance with Manufacturer's Instructions *	Yes
Nature of Product *	Block
Sampling Procedure *	Random
Address of Product Manufacturer *	Survey No. 615, 616, 617, 618, 619, 632, 633, 634, 650, Welspun City, Versamedi Village, Anjar, Kachchh, Gujarat, India, 370110.

* denotes customer supplied information

Sample Preparation

Description/Appearance of the product	Grey, opaque, rigid cement block
Length	50.3 mm
Width	50.8 mm
Surface area of one article	15331.4 mm ²
Number of articles constituting a sample	1
Surface area for test	15331.4 mm ²
Calibration mark of test container	1 L
Storage Conditions	As in BS 6920: Part 2: Section 2.1: Clause 5.2

Preconditioning

Preconditioning	The product was preconditioned in accordance with BS 6920: Part 2: Section 2.1: Clause 6.14.1.3
Aggressivity Index of preconditioning water	12.6
Sample code 10 pH readings	8.196, 8.162.
Sample code 20 pH readings	8.200, 8.166.

Job Attachments:



Photo 1

Extraction of Metals BS 6920: Part 1: 2014, Clause 8 - 65°C

Methodology: BS 6920: Part 2: Section 2.6 and in-house methods PROC/MAT 006 (leachate preparation) and PROC/ING 003 (ICPMS analysis).

Date Leaching Tests Started: 25-SEP-2023

First Extract

Metal (µg/L)	MAC (µg/L)	LOD (µg/L)	Blank (µg/L)	Sample 1 (µg/L)	Sample 2 (µg/L)
Aluminium	200	20	<20	50.8	75.2
Antimony	5	0.5	<0.5	<0.5	<0.5
Arsenic	10	1	<1	<1	<1
Boron	1000	100	<100	<100	<100
Cadmium	5	0.5	<0.5	<0.5	<0.5
Chromium	50	5	<5	<5	<5
Iron	200	20	<20	<20	<20
Lead	10	1	<1	<1	<1
Manganese	50	5	<5	<5	<5
Mercury	1	0.1	<0.1	<0.1	<0.1
Nickel	20	2	<2	<2	<2
Selenium	10	1	<1	<1	<1

Analytical Method - ICPMS Inductively Coupled Plasma Mass Spectrometry
 MAC - Maximum admissible concentration
 LOD - Required limit of detection

On the basis of these results the samples of this product referred to in this report have been found to conform to the requirements of BS 6920: Part 1: 2014, Clause 8.



<< **Testing Laboratories** >>

	<u>Flag</u>	<u>Id</u>	<u>Address</u>
All work performed at: (Unless otherwise specified)	→	NSF_WALES	NSF Wales Ltd. NSF Wales Ltd Unit 30 Fern Close Pen-Y-Fan Industrial Estate Oakdale, Newport NP11 3EH, UK

Job Notes:

This report replaces previously issued report with serial# F120231019041103. This report is being re-issued due to change to mix ratio to indicate Cement:sand:water, 2:3:1 wt/wt. This does not change the overall status of the report.

NOTES

1. This report is issued in accordance with the laboratory accreditation requirements of the United Kingdom Accreditation Service (UKAS). NSF Wales Ltd is UKAS accredited against ISO/IEC 17025:2017 for testing, laboratory number 0626. For details of the laboratory Schedule of Accreditation please see the UKAS website (www.ukas.com).
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5. Opinions and interpretations in this report are outside the scope of UKAS Accreditation.
6. The results specified in this report relate only to the sample(s) of the product submitted for testing. Any change in the source or nature of the product or materials used in the product, method of manufacture or application could affect the performance of the product.
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11. We draw to your attention that reports issued by the accredited test laboratories do not of themselves constitute approval by the Water Regulations Advisory Scheme or the test laboratory. Only a letter from the Scheme, citing a Directory Reference number can be regarded as indicating approval.
12. Materials and products intended for use by public water supply company in the preparation or conveyance of water may need to satisfy more comprehensive toxicological requirements as specified by the Drinking Water Inspectorate. These additional requirements are necessary to ensure water Company usage complies with Regulation 31 of the Water Supply (Water Quality) Regulations 2010.



Unit 30 | Fern Close | Pen-Y-Fan Ind Est | Oakdale | Gwent | NP11 3EH | UK
Tel: +44 (0) 1495 236260 wales@nsf.org | www.nsf.org

TEST REPORT

Customer: C0771903

Welspun DI Pipes Limited
Survey No. 615, 616, 617, 618, 619, 632, 633,
634 and 650,
Welspun City
Versamedi Village, Anjar,
Kachchh, GJ 370110
India

Revised Report

Result Limited testing was undertaken on this product in accordance with BS 6920: Part 2: Section 2.1: 2014, clause 6.14.2.1 (Factory made cementitious products free from organic additives or organic coatings). This product has satisfied the criteria set out in BS 6920: Part 1: 2014 "Specification" and thus is suitable for use with hot (up to 65°C) and cold water.

Customer Name	Welspun DI Pipes Limited
Product	Welmortar-BFS
Test Undertaken	BS 6920: 2014 - 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
Job Number	J-00465869
Work Order Number	W0850084

Thank you for having your product tested by NSF Wales Ltd.

Please contact your Account Manager if you have any questions or concerns pertaining to this report.

Report Date 23-NOV-2023
Original issue date: 19-OCT-2023

Report Authorisation

Eleanor Burger - Senior Project Manager Labs



0626

F120231123061104

J-00465869

Page 1 of 9

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Result Summary Section

Test	Result
Extraction of Metals BS 6920: Part 1: 2014, Clause 8 - 65°C	Pass

Sample Details

Date of Receipt of Application Form	24/05/23
Date of Receipt of Product for Test	03/07/23
Front Cover Test Description	Limited testing was undertaken on this product in accordance with BS 6920: Part 2: Section 2.1: 2014, clause 6.14.2.1 (Factory made cementitious products free from organic additives or organic coatings).
Date Test Sample Prepared *	26/03/23
Product *	Welmortar-BFS
Nature of Material *	Cement
Date Test Sample Manufactured *	26/03/23
Batch Number *	BC26
Receipt Conditions	Good Condition
Receipt Packaging	BUBBLE WRAP
Product Manufacturer *	Welspun DI Pipes Limited
Product Manufacturing Site *	India
Tradename and Reference of Product *	Welmortar-BFS
Method of Manufacture *	Mixing
Typical Use of the Product *	Cement in contact with potable water.
Substrate *	Ductile iron
Method of Application *	Centrifugal spinning then cast into blocks
Number and Thickness of Coats Applied *	One coat 50 x 50 mm block (Cement:sand:water, 2:3:1 wt/wt)
Ambient Temperature at Time of Application *	30 °C
Curing Time *	28 days
Curing Temperature *	30 °C
Curing Place *	At the facilities of the manufacturer
Preparation and Curing Conditions in Accordance with Manufacturer's Instructions *	Yes
Nature of Product *	Block
Sampling Procedure *	Random
Address of Product Manufacturer *	Survey No. 618, Survey No. 615, 616, 617, 618, 619, 632, 633, 634, 650, Welspun City, Versamedi Village, Anjar, Kachchh, Gujarat, India, 370110.

* denotes customer supplied information

Sample Preparation

Description/Appearance of the product	Grey, opaque, rigid cement block
Length	50.3 mm
Width	50.8 mm
Surface area of one article	15331.4 mm ²
Number of articles constituting a sample	1
Surface area for test	15331.4 mm ²
Calibration mark of test container	1 L
Storage Conditions	As in BS 6920: Part 2: Section 2.1: Clause 5.2

Preconditioning

Preconditioning	The product was preconditioned in accordance with BS 6920: Part 2: Section 2.1: Clause 6.14.1.3
Aggressivity Index of preconditioning water	12.6
Sample code 10 pH readings	8.098, 8.106.
Sample code 20 pH readings	8.144, 8.101.

Job Attachments:

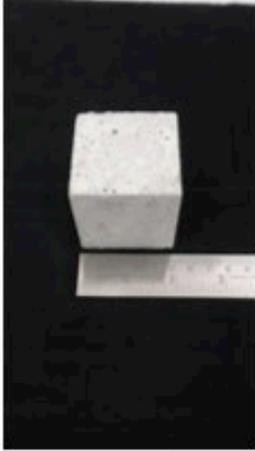


Photo 1

Extraction of Metals BS 6920: Part 1: 2014, Clause 8 - 65°C

Methodology: BS 6920: Part 2: Section 2.6 and in-house methods PROC/MAT 006 (leachate preparation) and PROC/ING 003 (ICPMS analysis).

Date Leaching Tests Started: 25-SEP-2023

First Extract

Metal (µg/L)	MAC (µg/L)	LOD (µg/L)	Blank (µg/L)	Sample 1 (µg/L)	Sample 2 (µg/L)
Aluminium	200	20	<20	141	191
Antimony	5	0.5	<0.5	<0.5	<0.5
Arsenic	10	1	<1	<1	<1
Boron	1000	100	<100	<100	<100
Cadmium	5	0.5	<0.5	<0.5	<0.5
Chromium	50	5	<5	13.3	<5
Iron	200	20	<20	33.5	<20
Lead	10	1	<1	<1	<1
Manganese	50	5	<5	<5	<5
Mercury	1	0.1	<0.1	<0.1	<0.1
Nickel	20	2	<2	<2	<2
Selenium	10	1	<1	<1	<1

Analytical Method - ICPMS Inductively Coupled Plasma Mass Spectrometry
 MAC - Maximum admissible concentration
 LOD - Required limit of detection

On the basis of these results the samples of this product referred to in this report have been found to conform to the requirements of BS 6920: Part 1: 2014, Clause 8.



<< Testing Laboratories >>

	<u>Flag</u>	<u>Id</u>	<u>Address</u>
All work performed at: (Unless otherwise specified)	→	NSF_WALES	NSF Wales Ltd. NSF Wales Ltd Unit 30 Fern Close Pen-Y-Fan Industrial Estate Oakdale, Newport NP11 3EH, UK

Job Notes:

This report replaces previously issued report with serial# F120231019041102. This report is being re-issued due to indicate Cement:sand:water mix ratio. This does not change the overall status of the report.

NOTES

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CARTA SEGÚN RD 2023 & INFORME EPAL



Madrid, 1 de Abril de 2025

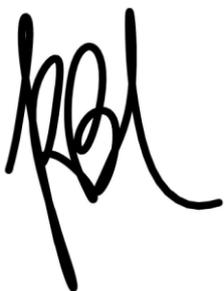
Att. A quien corresponda.

Asunto: Declaración responsable según RD3/2023.

Declaración responsable de cumplimiento conforme al artículo 44 y la disposición transitoria única del Real Decreto 3/2023, de 10 de enero, por el que se establecen los criterios técnico-sanitarios de la calidad del agua de consumo, su control y suministro.

El fabricante WELSPUN EUROPE, S.A., con domicilio en C/ Juan Esplandiú, 11, Tercero, CP. 28007, Madrid, inscrito en el Registro Mercantil de Madrid, declara, bajo su responsabilidad, que el producto con referencia "Tubería de Fundición Dúctil según norma EN 544:2011 (EJ: DN XXX, WESPUNFLOW, N°/LETRA/AÑO), y cuyo uso previsto es ABASTECIMIENTO DE AGUA, cumple con los requisitos aplicables en el Real Decreto 3/2023, de 10 de enero, conforme al ANEXO I, donde se indican el listado de componentes y sus valores determinados que debe cumplir obligatoriamente este producto.

Madrid, 1 de abril de 2025.



J. Raúl Bartolomé

Director Comercial Welspun Europe, S.A.

CONSTRUCTION MATERIALS IN CONTACT WITH WATER INTENDED FOR HUMAN CONSUMPTION

DECLARATION OF APPROVAL

CLIENT: WELSPUN EUROPE, S.A.

MANUFACTURER: WELSPUN CORP.

ADDRESS: C/ JUAN ESPLANDIU 11-13, 28007 MADRID, SPAIN

Process number: 04/2025

Declaration date: JUNE 11, 2025

The WELSPUN PIPE BFSC material is approved for use in contact with water intended for human consumption, in the EPAL supply system, in accordance with the specifications of the EPAL approval system for materials in contact with water.

This statement only concerns the assessment of the influence of materials on the quality of water for human consumption with regard to physical-chemical, chemical and organoleptic changes, in accordance with current European migration testing standards.

This statement is not related to the physical characteristics of the materials.

Empresa Portuguesa das Águas Livres, S.A.
Direção de Laboratórios

O DIRETOR

RUI MIGUEL Digitally signed
MENEZES by RUI MIGUEL
DAS NEVES MENEZES DAS
CARNEIRO NEVES CARNEIRO
Date: 2025.06.12
12:43:35 +01'00'

(Rui Neves Carneiro)

This declaration is issued in accordance with the results contained in the test report on the WELSPUN PIPE BFSC material, dated June 11, 2025.

The declaration is valid for 5 years, unless there is a change in the product formulation or production process.

The declaration is 1 page long.

Publication of the statement is permitted.

Av. Berlim, nº 15 1800-031 Lisboa

Telefone: 218 552 700 Fax: 218 552 724 e-mail • ruí.carneiro@adp.pt Internet • www.epal.pt



**POTABILIDAD AGUA EMPLEADA
EN MORTERO
(DIRECTIVA EUROPEA 98/83/CE,
2020/2184, RD 3/2023)**



TEST REPORT

ULR-TC546024000039964F
Test Report No. BLR/F(C/M)/24/039553
Dated 2024-09-28



Issued to : WELSPUN DI PIPES LIMITED
Welspun City, Sy. No. 633,
Versamedi Village
Taluka- Anjar,
Kachchh, Gujarat,
India - 370110.

Attention : Mr. Prabhunoy Datta,

Customer Ref. No. : Letter,

Sample Particulars

Sample Name : CML Water

Sample No. : BLR/F(C/M)/24/039553

Batch No. / Lot No. / Mfg. Date / Best Before Date : Not Available

Sample Package / Quantity : Plastic Container : 5 Ltrs X 03 Number's + Sterile Plastic Container : 4.5 Ltr X 1 Number + Sterile Plastic Container : 500ml X 1 Number

Sampled by : Representative of TÜV SÜD South Asia Pvt Ltd (Mr. Susanth Kumar Ghosh)
@ CML Process (Cold Zone) Area | M/s. Welspun Di Pipes Limited., Welspun City, Versamedi Village, Taluka Anjar, Kutch, Gujarat, India – 370110. Sampling Date & Time : 11.09.2024 & 10:00 am to 11:00 am

Sampling Location : Lab_P_SOP_123

Sampling Protocol : Good

Sample Condition : Good

Date of Sample Receipt : 2024-09-14

Date of Analysis : 2024-09-16

Date of Completion : 2024-09-27



Report Reviewed By

James Dsouza

Report Reviewer

By accepting this document the customer hereby agrees and accepts the 'Terms & Conditions' and the relevant 'Testing & Certification Regulations' of TÜV SÜD South Asia Pvt. Ltd. which are available at Company's website at the link- <https://www.tuvsud.com/en-in/terms-and-conditions>

Note: For any technical query, please contact . V G Ramesh at Ramesh.Vg@tuvsud.com and for any complaint please contact [Arun George at arun.george@tuvsud.com](mailto:Arun.George@tuvsud.com)

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Laboratory:
TÜV SÜD South Asia Pvt. Ltd.
No. A 151, 2nd C Main, 2nd
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Peenya Industrial Estate,
Bangalore,
Karnataka - 560058

Phone :+91 80 67456096
Fax :+91 80 67456058
E-Mail
Prjeshh.Balakrishnan@tuvsud.com
Url :www.tuv-sud.in
ControlNo:15360250.140924.121

Regs. Office:
TÜV SÜD South Asia Pvt. Ltd. Off
Saki Vihar Road, Saki naka,
Anchar (East), Mumbai-400072,
India

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SÜD
Page 1 of 7

TEST REPORT

ULR-TC546024000039964F
 Test Report No. BLR/F(C/M)/24/039553
 Dated 2024-09-28



TEST RESULTS

Test Results – Accredited Parameters

S. No.	Parameters	Results	Specification as per 2020-2184	Protocol
PART # A				
MICROBIOLOGICAL PARAMETERS				
1	E. coli	Absent	0 / 100 ml	ISO 9308 - 1 : 2014
2	Coliforms	Absent	0 / 100 ml	ISO 9308 - 1 : 2014
3	Faecal Enterococci	Absent	0 / 100 ml	ISO 7899 - 2 : 2000
4	Colony Count @ 22 deg C	< 1	No abnormal Change, cfu/ml	ISO 6222 : 1999
5	Clostridium perfringens	Absent	0 / 100 ml	ISO 14189 : 2013
6	Somatic Coliphages, /100 ml	Absent	50.0, PFU	[Part A of Annex II, EN ISO 10705-2]
PART # B				
CHEMICAL PARAMETERS				
1	Acrylamide, µg/l	Not Detected (LOQ : 0.1)	Max 0.10	Lab_P_SOP_279: 2021
2	Antimony, µg/l	BLQ (LOQ : 1.25)	Max 10.0	Lab_P_SOP_316: 2021
3	Arsenic, µg/l	BLQ (LOQ : 0.2)	Max 10.0	Lab_P_SOP_316: 2021
4	Benzene, µg/l	Not Detected (LOQ : 0.25)	Max 1.0	Lab_P_SOP_280: 2021
5	Benzo (a) Pyrene, µg/l	Not Detected (LOQ : 0.01)	Max 0.01	Lab_P_SOP_47: 2019
6	Boron, mg / l	0.25	Max 1.5	Lab_P_SOP_316 : 2021
7	Bromate, µg/l	BLQ (LOQ : 10.0)	Max 10.0	ISO 15061: 2001
8	Chromium µg/l	BLQ (LOQ : 1.0)	Max 25.0	Lab_P_SOP_316 : 2021
9	Cadmium, µg/l	BLQ (LOQ : 0.5)	Max 5.0	Lab_P_SOP_316 : 2021
10	Copper, mg / l	BLQ (LOQ : 0.01)	Max 2.0	Lab_P_SOP_316 : 2021
11	Cyanide, µg/l	Not Detected (DL : 50.0)	Max 50.0	IS 3025 (Part 27/Sec 1): 2021
12	1, 2 – Dichloroethane, µg/l	Not Detected (LOQ : 0.75)	Max 3.0	Lab_P_SOP_280 : 2021
13	Epichlorohydrin, µg/l	Not Detected (LOQ : 0.05)	Max 0.1	Lab_P_SOP_280 : 2021
14	Fluoride, mg / l	< 0.1	Max 1.5	IS 3025 (Part 60): 2008
15	Chlorite, mg / l	< 0.1	Max 0.25	4110 B, APHA 24th Edition: 2023

Laboratory
 TUV SUD South Asia Pvt. Ltd.
 No. A 151, 2nd C Main, 2nd
 Stage,
 Peenya Industrial Estate,
 Bangalore,
 Karnataka - 560056

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 Fax :+91 80 67458058
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 Praveen.Balakrishnan@tuv-sud.com
 Url :www.tuv-sud.in
 ControlNo:15360290,140324,121

Regd. Office:
 TUV SUD South Asia Pvt. Ltd, Off Saki
 Vihar Road, Saki naka, Andheri (East),
 Mumbai-400072, India

TUV[®]
 SUD
 Page 2 of 7

TEST REPORT

ULR-TC546024000039964F
 Test Report No. BLR/F(C/M)/24/039553
 Dated 2024-09-28



TC-5460

S. No.	Parameters	Results	Specification as per 2020-2184	Protocol
16	Lead, µg/l	BLQ (LOQ : 2.0)	Max 5.0	Lab_P_SOP_316 : 2021
17	Mercury, µg/l	BLQ (LOQ : 0.3)	Max 1.0	Lab_P_SOP_316 : 2021
18	Uranium, µg/l	BLQ (LOQ : 3.0)	Max 30.0	Lab_P_SOP_316 : 2021
19	Nickel, µg/l	BLQ (LOQ : 2.0)	Max 20.0	Lab_P_SOP_316 : 2021
20	Nitrates, mg / l	3.9	Max 50.0	4500 B, APHA 24 th Edition
21	Nitrites, mg / l	< 0.1	Max 0.5	APHA 23 rd Edition 4500 NO2 - B: 2017
22	Pesticides			
A	Organochlorine Group :			
	Aldrin, µg/l	Not Detected (LOQ : 0.01)	Max 0.03	Lab_P_SOP_47 : 2019
	Chlordane, µg/l	Not Detected (LOQ : 0.01)	Max 0.1	Lab_P_SOP_47 : 2019
	Dieldrin, µg/l	Not Detected (LOQ : 0.01)	Max 0.03	Lab_P_SOP_47 : 2019
	Endosulphan (Alpha) , µg/l	Not Detected (LOQ : 0.01)	Max 0.1	Lab_P_SOP_47 : 2019
	Endosulphan (Beta) , µg/l	Not Detected (LOQ : 0.01)	Max 0.1	Lab_P_SOP_47 : 2019
	Endrin, µg/l	Not Detected (LOQ : 0.01)	Max 0.1	Lab_P_SOP_47 : 2019
	Heptachlor, µg/l	Not Detected (LOQ : 0.01)	Max 0.03	Lab_P_SOP_47 : 2019
	O, P – DDT, µg/l	Not Detected (LOQ : 0.01)	Max 0.1	Lab_P_SOP_47 : 2019
	O, P – DDE, µg/l	Not Detected (LOQ : 0.01)	Max 0.1	Lab_P_SOP_47 : 2019
	O, P – DDD, µg/l	Not Detected (LOQ : 0.01)	Max 0.1	Lab_P_SOP_47 : 2019
	P, P - DDT, µg/l	Not Detected (LOQ : 0.01)	Max 0.1	Lab_P_SOP_47 : 2019
	P, P - DDE, µg/l	Not Detected (LOQ : 0.01)	Max 0.1	Lab_P_SOP_47 : 2019
	P, P - DDD, µg/l	Not Detected (LOQ : 0.01)	Max 0.1	Lab_P_SOP_47 : 2019
	2, 4 – D, µg/l	Not Detected (LOQ : 0.01)	Max 0.1	Lab_P_SOP_47 : 2019
	HeptaChlor Epoxide, µg/l	Not Detected (LOQ : 0.01)	Max 0.03	Lab_P_SOP_47 : 2019
	Alpha - HCH, µg/l	Not Detected (LOQ : 0.01)	Max 0.1	Lab_P_SOP_47 : 2019
	Beta - HCH, µg/l	Not Detected (LOQ : 0.01)	Max 0.1	Lab_P_SOP_47 : 2019
	Gamma - HCH, µg/l	Not Detected (LOQ : 0.01)	Max 0.1	Lab_P_SOP_47 : 2019
	Delta - HCH, µg/l	Not Detected (LOQ : 0.01)	Max 0.1	Lab_P_SOP_47 : 2019
	Endosulfan Sulfate, µg/l	Not Detected (LOQ : 0.01)	Max 0.1	Lab_P_SOP_47 : 2019
B	Organophosphate Group :			
	Malathion, µg/l	Not Detected (LOQ : 0.01)	Max 0.1	Lab_P_SOP_47 : 2019
	Parathion Methyl, µg/l	Not Detected (LOQ : 0.01)	Max 0.1	Lab_P_SOP_47 : 2019
	Monocrotophos, µg/l	Not Detected (LOQ : 0.01)	Max 0.1	Lab_P_SOP_47 : 2019
	Chlorpyrifos, µg/l	Not Detected (LOQ : 0.01)	Max 0.1	Lab_P_SOP_47 : 2019
	Phorate, µg/l	Not Detected (LOQ : 0.01)	Max 0.1	Lab_P_SOP_47 : 2019
	Phorate Sulfoxide, µg/l	Not Detected (LOQ : 0.01)	Max 0.1	Lab_P_SOP_47 : 2019
	Phorate Sulfone, µg/l	Not Detected (LOQ : 0.01)	Max 0.1	Lab_P_SOP_47 : 2019
	Methyl Paraxon, µg/l	Not Detected (LOQ : 0.01)	Max 0.1	Lab_P_SOP_47 : 2019

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TEST REPORT

ULR-TC546024000039964F
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TC-5460

S. No.	Parameters	Results	Specification as per 2020-2184	Protocol
	Malaxon, µg/l	Not Detected (LOQ : 0.01)	Max 0.1	Lab_P_SOP_47 : 2019
	Ethion, µg/l	Not Detected (LOQ : 0.01)	Max 0.1	Lab_P_SOP_47 : 2019
C	Others :			
	Butachlor, µg/l	Not Detected (LOQ : 0.01)	Max 0.1	Lab_P_SOP_47 : 2019
	Alachlor, µg/l	Not Detected (LOQ : 0.01)	Max 0.1	Lab_P_SOP_47 : 2019
	Atrazine, µg/l	Not Detected (LOQ : 0.01)	Max 0.1	Lab_P_SOP_47 : 2019
	Iso Proturon, µg/l	Not Detected (LOQ : 0.01)	Max 0.1	Lab_P_SOP_47 : 2019
	Total Pesticide			
	Total Pesticide Residues, µg/l	Not Detected (LOQ : 0.01)	Max 0.5	Lab_P_SOP_47 : 2019
23	Polycyclic Aromatic Hydrocarbons :			
	Poly Aromatic Hydrocarbons (as PAH) , µg / l	Not Detected (LOQ : 0.01)	Max 0.10	Lab_P_SOP_47 : 2019
	Benzo (b) Fluoranthene, µg / l	Not Detected (LOQ : 0.01)	Max 0.10	Lab_P_SOP_47 : 2019
	Benzo (k) Fluoranthene, µg / l	Not Detected (LOQ : 0.01)	Max 0.10	Lab_P_SOP_47 : 2019
	Benzo (ghi) Perylene, µg / l	Not Detected (LOQ : 0.01)	Max 0.10	Lab_P_SOP_47 : 2019
	Indeno (1, 2, 3 - cd) Pyrene, µg / l	Not Detected (LOQ : 0.01)	Max 0.10	Lab_P_SOP_47 : 2019
24	Selenium, µg / l	BLQ (LOQ : 1.0)	Max 20.0	Lab_P_SOP_316 : 2021
25	Tetrachloroethene, µg/l	Not Detected (LOQ : 1.25)	Max 10.0	Lab_P_SOP_280 : 2021
26	Trichloroethene, µg/l	Not Detected (LOQ : 1.25)		
27	Vinyl Chloride, µg/l	Not Detected (LOQ : 0.25)	Max 0.5	Lab_P_SOP_280 : 2021
Trihalomethanes - total				
28	Dibromochloromethane, µg/l	Not Detected (LOQ : 6.25)	Max 100.0	Lab_P_SOP_280 : 2021
29	Bromodichloromethane, µg/l	Not Detected (LOQ : 6.25)		
30	Chloroform, µg/l	Not Detected (LOQ : 6.25)		
31	Bromoform, µg/l	Not Detected (LOQ : 6.25)		
PART # C				
INDICATOR PARAMETERS				
1	Aluminium µg/l	BLQ (LOQ : 10.0)	Max 200.0	Lab_P_SOP_316 : 2021
2	Ammonium, mg / l	< 0.5	Max 0.5	IS 3025 (Part 34): 1988
3	Chlorides, mg / l	38.7	Max 250.0	IS 3025 (Part 32): 1988
4	Colour, Hazen Units	Acceptable	Acceptable to consumers and no abnormal Change	IS: 3025 (PART 4): 2021

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S. No.	Parameters	Results	Specification as per 2020-2184	Protocol
5	Conductivity @ 20 deg C, $\mu\text{S} / \text{cm}$	222.0	Max 2500.0	2510 B, APHA 24 th Edition
6	Hydrogen Ion Concentration	7.7	≥ 6.5 and ≤ 9.5	IS 3025 (Part 11): 2022
7	Iron, $\mu\text{g}/\text{l}$	BLQ (LOQ : 15.0)	Max 200.0	Lab_P_SOP_316 : 2021
8	Manganese, $\mu\text{g}/\text{l}$	BLQ (LOQ : 1.0)	Max 50.0	Lab_P_SOP_316 : 2021
9	Odour	Acceptable	Acceptable to consumers and no abnormal Change	IS: 3025 (PART 5): 2018
10	Sulphate, mg / l	41.0	Max 250.0	IS 3025 (Part 24/Sec 1): 2022
11	Sodium, mg / l	16.04	Max 200.0	Lab_P_SOP_316 : 2021
12	Taste	Acceptable	Acceptable to consumers and no abnormal Change	2160 C, APHA 24 th Edition
13	Turbidity, NTU	Acceptable	Acceptable to consumers and no abnormal Change	IS 3025 (Part 10): 1984
14	Oxidisability, mg / l of O ₂	< 5.0	Max 5.0	5220 B, APHA 24 th Edition



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Test Results – Non-accredited Parameters

S. No.	Parameters	Results	Specification as per 2020-2184	Protocol
15#	PFAS Total, µg/l	Not Detected (LOQ : 0.1)	Max 0.5	LC-MS/MS
16#	Bisphenol A, µg/l	Not Detected (LOQ : 2.5)	Max 2.5	EN 14372 - 2004
17	Chlorate, mg / l	Not Detected (LOQ : 0.01)	Max 0.25	Lab_P_SOP_406
18	Total Organic Carbon (TOC), mg / l	Not Detected (DL : 0.1)	No abnormal Change	Lab_P_SOP_166
19#	Sum of PFAS			
	Perfluorobutanoic acid (PFBA), µg/l	Not Detected (LOQ : 0.1)	Max 0.1	LC-MS/MS
	Perfluoropentanoic acid (PFPA), µg/l	Not Detected (LOQ : 0.1)		
	Perfluorohexanoic acid (PFHxA), µg/l	Not Detected (LOQ : 0.1)		
	Perfluoroheptanoic acid (PFHpA), µg/l	Not Detected (LOQ : 0.1)		
	Perfluorooctanoic acid (PFOA), µg/l	Not Detected (LOQ : 0.1)		
	Perfluorononanoic acid (PFNA), µg/l	Not Detected (LOQ : 0.1)		
	Perfluorodecanoic acid (PFDA), µg/l	Not Detected (LOQ : 0.1)		
	Perfluoroundecanoic acid (PFUnDA), µg/l	Not Detected (LOQ : 0.1)		
	Perfluorododecanoic acid (PFDoDA), µg/l	Not Detected (LOQ : 0.1)		
	Perfluorotridecanoic acid (PFTrDA), µg/l	Not Detected (LOQ : 0.1)		
	Perfluorobutane sulfonic acid (PFBS), µg/l	Not Detected (LOQ : 0.1)		
	Perfluorohexane sulfonic acid (PFHxS), µg/l	Not Detected (LOQ : 0.1)		
	Perfluoroheptane sulfonic acid (PFHpS), µg/l	Not Detected (LOQ : 0.1)		
	Perfluorooctane sulfonic acid (PFOS), µg/l	Not Detected (LOQ : 0.1)		
	Perfluorodecane sulfonic acid (PFDS), µg/l	Not Detected (LOQ : 0.1)		
20	Halo acetic acids (HAAs) (Monochloro-, Dichloro-, and Trichloro-acetic acid, and mono - and Dibromo-acetic acid), µg/l	Not Detected (LOQ : 25.0)	Max 60.0	LC-MS/MS
21	Microcystin-LR, µg/l	Not Detected (LOQ : 1.0)	Max 1.0	LC-MS/MS
22	Alpha Emitters ##	BDL (MDA : 0.0054)	Max 0.1	IS : 14194 (P2) - 2013
	Beta Emitters ##	BDL (MDA : 0.02)	Max 1.0	IS : 14194 (P1) - 2013

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Test Report No. **BLR/F(C/M)/24/039553**
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MICROBIOLOGICAL PARAMETERS				
S. No.	Parameters	Results	Specification as per 2020-2184	Protocol
22	Legionella, /0.1 ml	Absent	-	9260J, APHA 23rd Edition 2017

NOTE: Unless otherwise agreed upon, Pass or Fail or Statement of compliance verdicts are given based on the measured values without any considerations of measurement uncertainties. Every test method has a measurement uncertainty which has been evaluated by the laboratory and are available on request. By taking measurement uncertainties into account, it might happen that measured values can neither be assessed as Pass nor as Fail.

LOQ: Limit of Quantification; DL: Detection Limit; BDL: Below Detection Limit, BLQ: Below Limit of Quantification.

Remark: The sample conforms to Directive (EU) 2020/2184 Specification with respect to tested parameters only.

Tests subcontracted to other TUV-SUD laboratory.

Tests subcontracted to ISO/IEC 17025 approved laboratory.

Authorized By

Authorized By

Authorized By

Authorized By

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- END OF TEST REPORT -

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