Approval Number: 1809532 Test Report: M106621



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

12th November 2018

Eppinco Plastic Pipes Industry LLC Algail Industrial Area, Ras Al Khaimah, UAE

WATER REGULATIONS ADVISORY SCHEME LTD. (WRAS) <u>MATERIAL APPROVAL</u>

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.

POLYETHYLENE - COMPONENTS.

5240

'Emipex'. White coloured, extruded PEX pipe. For use with water up to 85°C.

APPROVAL NUMBER: 1809532 APPROVAL HOLDER: EPPINCO PLASTIC PIPES INDUSTRY LLC

The Scheme reserves the right to review approval. Approval 1809532 is valid between September 2018 and September 2023

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

WRAS MATERIAL APPROVAL - MATERIALS WHICH HAVE PASSED FULL TESTS OF EFFECT ON WATER QUALITY

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

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 NO 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).

Please note it is the responsibility of the Approval Holder to ensure the Approval remains valid. WRAS Ltd. accepts no liability for the delay in granting approval where this is caused by circumstances outside of the Scheme's control.

CERTIFICATE

3

OF REGISTRATION

This is to certify that the Management System of

Eppinco Plastic Pipes Industry LLC

P.O. Box: 86105, Ras Al Khaimah, United Arab Emirates.

has been assessed and registered by Gabriel Registrar as conforming to the requirements of :

ISO 9001:2015 Quality Management System

The Quality Management System is applicable to :

Manufacturing & Sales of Pipes and Fittings.



GABRIEL REGISTRAR

CERTIFICATE NUMBER GR18-300608

INITIAL CERTIFICATION DATE 14-June-2018

CERTIFICATE VALID TILL 13-June-2021





[Full Member of IAF]

For the issuing office GABRIEL REGISTRAR P.O. Box: 55093, Abu Dhabi, United Arab Emirates.

Authorized Representative

1^e Surveillance due before : 13-June-2019 2^{es} Surveillance due before : 13-June-2020

This certificate remains valid while the holder maintains the management system in accordance with the standards above, which will be periodically audited as per the schedule mentioned above for its Validity.

Accredited by United Accreditation Foundation [UAF] 3510, Colmar, Norfolk 23509, VA, United States of America [USA]



Lack of fulfilment as set out in the certification agreement may render this certificate Invalid. In the issuance of this certificate, Gabriel Registrar assumes no Liability to any party other than to the client, and then only in accordance with the agreed upon certification agreement.

This certificate remains the property of Gabriel Registrar Certificate Issuing Services LLC and must be returned on request. Validity of this certificate may be confirmed at www.gabrielregistrar.com, directly through QR code by using any device with correct information or email to admin@gabrielregistrar.com



www.gabrielregistrar.com

Scanned by CamScanner

MEP SUPPLIER REGISTRATION CERTIFICATE

Issue Date:

We hereby register the Supplier:

ADCE Vendor Code:

Please refer Schedule A for Materials

Remarks:

Majdi Yousef

Registration Review Committee Signature 1

Mohammad Abedelatif Aboumayye

Registration Review Committee Signature 2



Disclaimer:

1) It is the role of the Consultant to select materials from the registered list.

2) The specifications of the selected materials are the sole responsibility of the Consultant.

10 December 2020

v0001873

Abusafieh Trading LLC

3) Nothing in this Registration Certificate absolves the Supplier or the Consultant from any liability towards any party. ADCE does not make any warranty or representation as to the quality, fitness for purpose, or suitability of the Materials and shall not be liable to any party for any loss including but not limited to the financial condition of the Supplier, the performance and observance by the Supplier or the Consultant of any contract or arrangement, or the accuracy of any statements made by the Supplier or the Consultant. Any representations or warranties implied by law are excluded. The issuing of this certificate does not confer any authority upon the Supplier or the Consultant.
 4) This certificate is valid for one year from issue date.



MEP SUPPLIER REGISTRATION CERTIFICATE

ADCE Vendor Code:

v0001873

Schedule A



PP-R Pipes & Fittings - Novatherm - Germany XLPE/PEX Pipes & Fittings - Emipex - UAE XLPE/PEX Pipes & Fittings - Fripex-san - Germany Solar system - Bosch - Germany Solar system - Renergy - Greece PP-R Pipes & Fittings - Emipipe - UAE PPR pipes & fittings - Emipipe - UAE



19 51 71 m S 10 51

rbenn 5! d: rbenn 5!



مختبر عطوم التربة لفحص المواد **GEOSCIENCE TESTING LABORATORY**

ANALYSIS REPORT ON NON - TOXICITY (PEX PIPE)

La	hR	of	or	en	res	
Bas GAT IS		-1		011		

Report No.	: R1DX18-176556	Report Date: 05/08/2018
Request No.	: Q1DX18-123584	Sample No. : S1DX18-123584
Testing Date	: 29/07/2018 - 04/08/2018	
Test Method	: Appearance of Water: BS 6920 – 2.2.3 2000	
	Growth of Aquatic Microorganism: BS 6920 -	2.2.4 2000
	Extraction of Metals: BS 6920 - 2.2.6 2000	
	Testing of Metals: APHA 3120 B (ICP-OES)	
Tested By	: SWE / SKM / JV / AME	
Sample Descr	iption: PEX PIPE	×.
Client Refere	nces:	
Client Name	: EPPINCO PLASTIC PIPES INDUSTRY LLC	
Project No.	: NOT GIVEN	
Project Name	: INTERNAL QUALITY CHECKING	

Address : DUBAI, UAE

Consultant : NO SPECIFIC CONTRACTOR

Contractor : NO SPECIFIC CONTRACTOR

1.0 Appearance of Water :

The sample PEX Pipe was immersed in the chlorine - free test water maintained at 25 °C & 80 °C for 24 hrs.

After 24 hrs the extracted water portion was tested together with the Blank water for Colour and Turbidity, using spectrophotometric method.

PARAMETER	Temper	Temperature 25 °C		Temperature 80 °C	
	Blank Water	Extracted Water	Blank Water	Extracted Water	LIMITS*
Turbidity (FAU)	0	0	0	0	0.5
Colour (Units)	0	0	0	0	5

Form: MD/G 01 Page 1 of 3

Issue: 01 / 14.10.2008

TORI Plot No.531-519 Dubai Industrial City For GEOSCIENCE TESTING ABORATORY

Dubai : P.O. Box : 61670, Tel : +971-4-431 4690, Fax : +971-4-431 4570 Sharjah (Khorfakhan) : P.O. Box : 64800, Tel : +971-9-238 9824, Fax : +971-9-238 9826 1670, Dub? Website : www.geoscience.ae E-mail : info@gtl.ae



مختبر عملوم المتربة لفحص المواد GEOSCIENCE TESTING LABORATORY

Report No.	: R1DX18-176556	Report Date	:05/08/2018
Request No.	: Q1DX18-123584	Sample No.	: S1DX18-123584

Remarks: Results obtained for extracted water and test water are below the allowable limits. Therefore, the submitted PEX Pipe sample is suitable for use in contact with water intended for human consumption, with regard to the above tested parameters.

2.0 Growth of Aquatic Microorganism Test

The sample PEX Pipe was immersed in the chlorine-free test water maintained at 25 $^{\circ}$ C & 80 $^{\circ}$ C for 24 hrs.

After 24 hrs the extracted water portion was tested together with the Blank water for Dissolved Oxygen.

PARAMETER	Tempe	rature 25 °C	Temperature 80 °C		ALLOWABLE	
	Blank Water	Extracted Water	Blank Water	Extracted Water	LIMITS [#]	
Dissolved Oxygen (mg/L)	7.4	7.2	6.9	6.6	2.39	

Remarks: Dissolved Oxygen difference between extracted water and Blank water result is below the allowable limits. Hence, the submitted sample is regarded as not being capable of supporting appreciable microbial growth when in contact with water intended for human consumption.

3.0 Extraction of Metals

The sample PEX Pipe was immersed in the chlorine-free test water maintained at 25 $^{\circ}$ C & 80 $^{\circ}$ C for 24 hrs.

After 24 hrs the extracted water portion was tested for presence of metals using Inductively Coupled Plasma (ICP-OES). The water extract was acidified prior to testing using concentration HNO_3 (5 ml HNO_3 / 1000 ml extract).



Form : MD/G 01 Page 2 of 3 Issue : 01 / 14.10.2008

Rev.: 0/-

For GEOSCIENCE TESTING LABORATORY

Dubai : P.O. Box : 61670, Tel : +971-4-431 4690, Fax : +971-4-431 4570 Sharjah (Khorfakhan) : P.O. Box : 64800, Tel : +971-9-238 9824, Fax : +971-9-238 9826 Website : www.geoscience.ae E-mail : info@gtl.ae



مختبر عملوم التربة لفحص المواد GEOSCIENCE TESTING LABORATORY

Report No.	: R1DX18-176556	Report Date	:05/08/2018
Request No.	: Q1DX18-123584	Sample No.	: S1DX18-123584

Table 1. Metal Analysis Results

	ALLOWABLE	RESULT	S (mg/L)
PARAMETERS	LIMITS [#] (mg/L)	Temperature 25 °C	Temperature 80 °C
1. Aluminum	0.2	< 0.005	< 0.005
2. Antimony	0.005	Not Detected	Not Detected
3. Arsenic	0.01	< 0.004	< 0.004
4. Barium	1.0	Not Detected	Not Detected
5. Cadmium	0.005	< 0.002	< 0.002
6. Chromium	0.05	< 0.007	< 0.007
7. Iron	0.2	< 0.009	< 0.009
8. Lead	0.025	< 0.008	< 0.008
9. Manganese	0.05	< 0.008	< 0.008
10. Mercury	0.001	< 0.001	< 0.001
11. Nickel	0.02	< 0.006	< 0.006
12. Selenium	0.01	< 0.006	< 0.006

[#] Only Applicable for 25 °C

ETESTINGLAD · Results relates only to the samples tested. Test reports shall not be reproduced (except in full) with out the written approvation the laboratory. Plot No.531-519 Rosaha M. Oquendo Dubai Industrial City Tel.: 04-431 4690 Form : MD/G 01 Issue : 01 / 14.10.2008 Unit Head (Chemical) Page 3 of 3 Dubai Fax: 04-431 4570 For GEOSCIENCE TESTING LABORATORY :67670, Dub

Dubai : P.O. Box : 61670, Tel : +971-4-431 4690, Fax : +971-4-431 4570 Sharjah (Khorfakhan) : P.O. Box : 64800, Tel : +971-9-238 9824, Fax : +971-9-238 9826 Website : www.geoscience.ae E-mail : info@gtl.ae

Remarks: When tested in accordance with BS 6920 – 2.6, the metal content is below the allowable limits. Hence, the soluble is suitable for use in contact with water intended for human consumption with regard to the above tested parameters.



خـــــتــبر عـــلـــوم الـــتربـــة لفحص المــواد **GEOSCIENCE TESTING LABORATORY**

ANALYSIS REPORT ON NON - TOXICITY (DZR FITTINGS)

Lab References:

Report No.	: R1DX18-176558	
------------	-----------------	--

Request No. : Q1DX18-123586

Report Date: 05/08/2018 Sample No. : S1DX18-123586

Testing Date	: 29/07/2018 - 04/08/2018

Test Method : Appearance of Water: BS 6920 - 2.2.3 2000 Growth of Aquatic Microorganism: BS 6920 - 2.2.4 2000 Extraction of Metals: BS 6920 - 2.2.6 2000 Testing of Metals: APHA 3120 B (ICP-OES)

Tested By : SWE / SKM / JV / AME

Sample Description: DZR FITTINGS

Client References:

Client Name	: EPPINCO	PLASTIC PIPES	INDUSTRY LLC
--------------------	-----------	---------------	--------------

Project No. : NOT GIVEN

Project Name : INTERNAL QUALITY CHECKING

Address : DUBAI, UAE

Consultant : NO SPECIFIC CONTRACTOR

Contractor : NO SPECIFIC CONTRACTOR

1.0 Appearance of Water :

The sample DZR Fittings was immersed in the chlorine - free test water maintained at 25 °C & 80 °C for 24 hrs.

After 24 hrs the extracted water portion was tested together with the Blank water for Colour and Turbidity, using spectrophotometric method.

PARAMETER	Temper	ature 25 °C	Temperature 80 °C		ALLOWABLE	
	Blank Water	Extracted Water	Blank Water	Extracted Water	LIMITS*	
Turbidity (FAU)	0	0	0	0	0.5	
Colour (Units)	0	1	0	1	5	

Form: MD/G 01 Page 1 of 3

Issue: 01 / 14.10.2008

Dubai Industrial City For GEOSCIENCE TESTINIOLABORATORY

CETESTING LAB

Plot No.531-510

Dubai : P.O. Box : 61670, Tel : +971-4-431 4690, Fax : +971-4-431 4570 Sharjah (Khorfakhan) : P.O. Box : 64800, Tel : +971-9-238 9824, Fax : +971-9-238 982670, Dube Website : www.geoscience.ae E-mail : info@gtl.ae



مختبر عطوم التربة لغدص المواد **GEOSCIENCE TESTING LABORATORY**

Report No. : R1DX18-176558 Request No. : Q1DX18-123586 Report Date :05/08/2018 Sample No.

: S1DX18-123586

Remarks: Results obtained for extracted water and test water are below the allowable limits. Therefore, the submitted DZR Fittings sample is suitable for use in contact with water intended for human consumption, with regard to the above tested parameters.

2.0 Growth of Aquatic Microorganism Test

The sample DZR Fittings was immersed in the chlorine-free test water maintained at 25 °C & 80 °C for 24 hrs.

After 24 hrs the extracted water portion was tested together with the Blank water for Dissolved Oxygen.

PARAMETER	Temper	rature 25 °C	Temperature 80 °C		ALLOWABLE	
	Blank Water	Extracted Water	Blank Water	Extracted Water	LIMITS [#]	
Dissolved Oxygen (mg/L)	7.4	7.2	6.9	6.6	2.39	

Remarks: Dissolved Oxygen difference between extracted water and Blank water result is below the allowable limits. Hence, the submitted sample is regarded as not being capable of supporting appreciable microbial growth when in contact with water intended for human consumption.

3.0 Extraction of Metals

The sample DZR Fittings was immersed in the chlorine-free test water maintained at 25 °C & 80 °C for 24 hrs.

After 24 hrs the extracted water portion was tested for presence of metals using Inductively Coupled Plasma (ICP-OES). The water extract was acidified prior to testing using concentration HNO3 (5 ml HNO₃ / 1000 ml extract).

Form: MD/G 01 Page 2 of 3

Issue: 01 / 14.10.2008

Rev. : 0/ -





مختبر عطوم التربة لفحص المواد GEOSCIENCE TESTING LABORATORY

Report No.	: R1DX18-176558	Report Date	:05/08/2018
Request No.	: Q1DX18-123586	Sample No.	: S1DX18-123586

Table 1. Metal Analysis Results

DADABATTERC	RESULTS (mg/L)		
PARAMETERS	Temperature 25 °C	Temperature 80 °C	
1. Aluminum	< 0.005	< 0.005	
2. Antimony	Not Detected	Not Detected	
3. Arsenic	< 0.004	< 0.004	
4. Barium	Not Detected	Not Detected	
5. Cadmium	< 0.002	< 0.002	
6. Chromium	< 0.007	< 0.007	
7. Iron	< 0.009	< 0.009	
8. Lead	< 0.008	0.122	
9. Manganese	< 0.008	< 0.008	
10. Mercury	< 0.001	< 0.001	
11. Nickel	. < 0.006	< 0.006	
12. Selenium	< 0.006	< 0.006	

"Only Applicable for 25 °C

Test Method Variation: The sample tested is metallic DZR Fittings.

 Results relates only to the sa Test reports shall not be repr 		out the written approval of the	laboratory.
Form: MD/G 01 Page 3 of 3	lssue : 01 / 14.10.20	★ Tel.: 04-431 4690 Fax: 04-431 4570 ★	Rosana M. Oquendo Unit Head (Chemical) Dubai EOSCIENCE TESTING LABORATORY

Dubai : P.O. Box : 61670, Tel : +971-4-431 4690, Fax : +971-4-431 4570 Sharjah (Khorfakhan) : P.O. Box : 64800, Tel : +971-9-238 9824, Fax : +971-9-238 9826 Website : www.geoscience.ae E-mail : info@gtl.ae



PROCESS CONTROL INSTRUMENTATION, FLOW METERS, VALVES & CALIBRATION SERVICES

CERTIFICATE OF TESTING

CERTIFIC	ALE OF LES	IING		QF-07 Rev-3	Page 1 of 1
Certificate No.:	2018101500	Date:	16/10/2018	Job No.:	9451
Customer:	Eppinco Plastic Pipe	es Industry	y LLC		
Address:	RAK, United Arab	Emirates			
Equipment Descr	viption: Sample of I	EMIPEX	Pipes with Fittings		
Manufacturer:	U.A.E.		Connection:	1/2 "	
Serial Number:	18-9451-02		Size:	16 x 2.2 n	nm
Test Pressure:	15.0 Bar		Test Medium:	Water	
Tested On:	16/10/2018				
Environmental C	onditions:				
Temperature:	22°C +/-2°C	1	Humidity:	50% +/-	10%

Calibration Technical Services hereby certifies that the above described instrument was tested in accordance with all published specification at the time of calibration specified below. Using, standards whose accuracies are traceable to international standards within the limitations of the Institute's calibrations services, or have been derived from accepted values or physical constants, or have derived by ratio of self calibration techniques. All tests equipment used by Caltech is traceable to National/International standards such as UKAS (UK), NPL, NKO, EAL, SI, NVLAP, and NIST (USA).Copies of traceable certificate are available upon request.

The uncertainty limits quoted refer to the measured values only, with no account being taken of the instruments ability to maintain its calibration.

Master Equipment:				Procedure:	WI-43
Description	Serial No.	Model	Certificate No.	Traceable S	tandard
Digital Press. Calibrator	53072	P 100	2018101500	UKA	S

TEST REPORT:

Tested By (6):

Calibration Technical Services hereby certifies that the above described pipe has been tested in accordance with DIN 8078: 1996-04 standards. The pipe was observed under pressure for 24 hours and found no cracks or leakage during and after the test. It is passed to use within the range of 15.0 Bar.

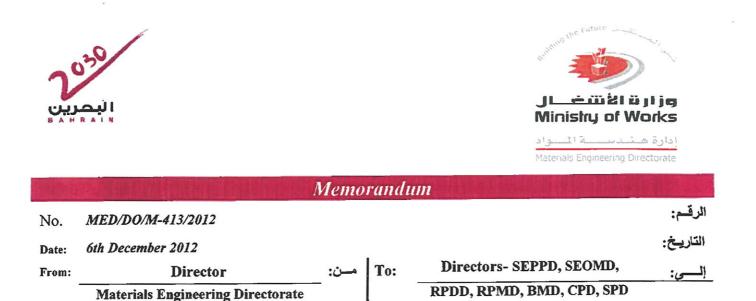
Note: This document may not be reproduced except in full, without the written approval of Calibration Technical Services

TROWNICH P

		INSPECTOR
	QA	INSPECTOR
Checked By: _	CALT	CH SERVICES
	CALC	

P.O. Box : 38384, Sharjah United Arab Emirates E-mail: caltech@emirates.net.ae Website : www.caltechuae.com





Subject: Material Compliance Report (MCR)

We wish to advise that **Mssr.** Al Madar General Trading Est. (Bahrain) had requested us to assess their Cross Linked PolyEthylene Pipes & Fittings (EMIPEX) from EPPINCO-UAE for consideration in MoW projects.

Following MED standard procedure for assessing materials/products, please find attached for your information Material Compliance Report (MCR 262 /12) for the aforementioned products.

For any further clarification please do not hesitate to contact the undersigned or the Chief of Consultancy and Research Section at 17 81 24 20 or facsimile at 17 81 24 19.

Regards,

Mahin

Sameer A. Affouni

cc: Section Chief CRS / MED File 3854 - RR





MED-CRS-F-009 Rev 0

MCR 262 / 12 MED File : 3854



Consultancy & Research Section

Material Compliance Report

(For Ministry of Works projects)

Material Detail:	Cross Linked PolyEthylene Pipes & Fittings (EMIPEX)
Manufacturer:	"EPPINCO " Plastic Pipes Industry -UAE
Applicant :	Al Madar General Trading Est. P.O. Box 15268 Manama – Kingdom of Bahrain

Following MED standard procedures for assessment and technical evaluations of the above Material as to compliance with Ministry of Works specifications and requirements, we advise as per the following details:

i. Compliance with Relevant Standards & Specifications

•		A DE partererer era van soe weeld be adde an	En B the second
V	Acceptable		
	Not Acceptable	8	D D D

ii. Adequacy for use in Ministry of Works projects

• 1	Adequate. The Material is suitable for use in the Ministry of Works projects.	
	Suitable for use with conditions. Please refer to comments below.	
	Put on-hold for follow-up. Please refer to comments below.	
	Not suitable	

iii. Comments

• The material will be subject to factory inspection and periodic quality control assessment by the Materials Engineering Directorate personnel's.

 This Report is valid for maximum of One (1) year(s) from the date of this Report unless otherwise stated or there is a change / revision in the material technical specifications, manufacturing process or relevant Standards & Specifications requirements.

Signed & stamped by,

Date: December 6th, 2012

Director, Materials Engineering Directorate

0 000

ص.ب: ٥، المنسامة، مملكة البحيرين، تليفون: ٥٤،٥٥٥ ١٧ ٩٧٣+، فأكس: ٨٢٢٧٢٨ ١٧ ٩٧٣ P.O. Box 5, Manama, Kingdom of Bahrain, Tel.: +973 17 545555, Fax: +973 17 532738

Notes: